Using Figurative Language

Herbert L. Colston

USING FIGURATIVE LANGUAGE

Using Figurative Language presents results from a multidisciplinary decades-long study of figurative language that addresses the question, "Why don't people just say what they mean?" This research empirically investigates goals speakers or writers have when speaking (writing) figuratively and, concomitantly, meaning effects wrought by figurative language usage. These *pragmatic effects* arise from many kinds of figurative language, including metaphors (e.g., "This computer is a dinosaur"), verbal irony (e.g., "Nice place you've got here"), idioms (e.g., "Bite the bullet"), proverbs (e.g., "Don't put all your eggs in one basket"), and others. Reviewed studies explore mechanisms – linguistic, psychological, social, and others – underlying pragmatic effects, some traced to basic processes embedded in human sensory, perceptual, embodied, cognitive, social, and schematic functioning. The book should interest readers, researchers, and scholars in fields beyond psychology, linguistics, and philosophy who share interests in figurative language – including language studies, communication, literary criticism, neuroscience, semiotics, rhetoric, and anthropology.

Herbert L. Colston is Professor and Chair of the Department of Linguistics at the University of Alberta. Previously, he was a professor of psychology at the University of Wisconsin–Parkside. Professor Colston has published widely and has edited several books, including *Figurative Language Comprehension: Social and Cultural Influences* and *Irony in Language and Thought: A Cognitive Science Reader*. He co-authored *Interpreting Figurative Meaning* (Cambridge University Press, 2012) with Raymond Gibbs.

Using Figurative Language

Herbert L. Colston
University of Alberta

CAMBRIDGE
UNIVERSITY PRESS

CAMBRIDGE
UNIVERSITY PRESS

32 Avenue of the Americas, New York, NY 10013-2473, USA

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning, and research at the highest international levels of excellence.

www.cambridge.org
Information on this title: www.cambridge.org/9781107105652

First published 2015

A catalog record for this publication is available from the British Library.

Library of Congress Cataloging in Publication Data
Colston, Herbert L.
Using figurative language / Herbert Colston.
pages cm
Includes bibliographical references and index.
ISBN 978-1-107-10565-2 (hardback)
1. Figures of speech. 2. Psycholinguistics. 3. Sociolinguistics. I. Title.
P37.5.F53C65 2015
808′.032–dc23 2015023013

ISBN 978-1-107-10565-2 Hardback

To Herbert A. Colston
and
Marlene D. Colston

You don't know anything,
unless you know everything.
You never know everything,
so you always know nothing.

CONTENTS

ACKNOWLEDGMENTS

Many grateful thanks to Adina Berk and Matthew Bennett at Cambridge University Press, along with the editorial and production staff, for their wonderful assistance and support with publication. I am as always indebted to my friends, colleagues, and collaborators for many invigorating conversations over the years about the topics treated in this book. Among these, I am grateful to Raymond W. Gibbs, Greg Bryant, Jennifer O'Brien, Albert Katz, Penny Pexman, Rachel Giora, Chris Kello, Gerry Steen, Teenie Matlock, Gary Wood, Greg Mayer, Brigitte Friedl-Colston, Morgan Colston, Sally Rice, and Juhani Jarvikivi. I also thank Yasmin Tulpar for assistance with references and indexing, Elizabeth French for administrative support at the University of Alberta, and the very large cadre of students who contributed to my research as collaborators, assistants, and participants.

PREFACE

Using Figurative Language was born out of the idea that accounts of language production, use, comprehension, structure, underpinning, and change, for figurative and indirect but additionally all language, need to align with current understandings of not only human cognitive phenomena but also social, emotional, motivational, physical, and other human and animal functioning along with established explications of the all the layers of language and their nature. In kind with the cognitive commitment, the scientific study of language conducted by allied disciplines needs also to adhere to a social commitment, a developmental commitment, an embodied commitment, and commitments to emotional, evolutionary, and other domains of human structure and operation, as well as to their complex interaction, to fully portray the processes and products stemming from human linguistic communication. Some of these source data come from research in the array of subdisciplines in psychology. Other input can be found in evolutionary theory, biology, the functioning of communication systems parallel to language, linguistics proper, cognitive linguistics, literary studies, semiotics, rhetoric, and other disciplines that focus on the processes and products or both of linguistic communion.

Particular focus was put on the social underpinnings of abstract thought and, in turn, language cognition given recent developments in sociocognitive neuroscience and embodiment research, which provides evidence that a major portion of how we do cognition and, accordingly, how we do language is wired to align with our level of connection with other people or groups and our status in social hierarchies – along with concomitant social motivations produced by such hierarchies. How our cognitive functions are tuned is related closely to how we operate as part of a human social group. These social constraints and corrallings, along with parallel embodied ones,

serve to orient human functioning, to make use of what is already present, and to direct us along paths set down as characteristic of evolved social species.

Caution was also raised, though, about viewing these recycling and channeled cognitive and communicative endowments as somehow deterministic for human behavior. The complexity of the chorus of processes and mechanisms that contribute to human behavior, linguistic and otherwise, affords a degree of dynamic chaos amid attractors, enabling emergent possibilities in behavioral and meaning outcomes. Tendencies nonetheless may be observed and used to construct parsimonious accounts of linguistic and related functioning. But the system maintains a modicum of volatility that occasionally can unpredictably alter linguistic behavioral patterns (e.g., production, comprehension, use, etc.).

It is hoped that this work will spur continued trajectories of incorporating linguistic, psychological, embodied, social, life-span developmental, and other contributing factors in language cognition explanation toward (1) better inclusion of multimodal, paralinguistic, and metalinguistic factors, (2) embracement of complex multivariate analysis and modeling techniques, and (3) increased blending of authenticity in content with rigor in methodology, leading to even greater crosstalk and cross-fertilization among disciplines working toward a scientifically holistic understanding of human language.

1

Why Don't People Say What They Mean? Wealth and Stealth

Please consider the following lines spoken by characters in the 1985 American film, *The Breakfast Club* (Friesen, Meyer & Hughes 1985). The movie depicts five students in punitive detention on a Saturday at their high school for infractions they committed separately. The students represent stereotypical adolescent social genres of 1980s middle America: a socialite (Claire), an athlete (Andrew), an intellectual (Brian), an introvert (Allison), and a delinquent (Bender). Using the vernacular of the characters themselves, we have a "princess," "athlete," "brain," "basket case," and "criminal." (Also included are Vernon, a school administrator, and Carl, a custodian.)

Rhetorical Question
CLAIRE: "Excuse me, sir, why would anybody want to steal a screw?"
ANDREW: "Where do you want me to go?"
BRIAN: "Who do I think I am?"

Metaphor
VERNON: "Don't mess with the bull young man; you'll get the horns."
ALLISON: "You never know when you may have to jam."
BRIAN: "The girl is an island with herself."

Idiom
VERNON "Any *monkey business* is ill advised."
ANDREW "I got the feeling that he was disappointed that I never *cut loose* on anyone"
BRIAN "You're so, like, *full of yourself*."

Metonymy
CARL: "I am the eyes and ears of this institution."
VERNON: "Watch your tongue"
BRIAN: "But what we found out is that each of us is a brain"

Verbal Irony

ANDREW: "That's real intelligent."
BENDER: "You richies are so smart."
BENDER: "Well … I'll just run right out and join the wrestling team."

Hyperbole

ALLISON: "You do everything everybody ever tells you to do; that is a problem!"
ANDREW: "You've never competed in your whole life!"
BENDER: "Screws fall out all the time; the world's an imperfect place."

Understatement

ALLISON: "My home life is … unsatisfying."
ANDREW: "Yeah … he's kinda … he's kinda skinny, weak."
VERNON: "Alright people, we're gonna try something a little different today."

Colloquial Tautology

VERNON: "Here we are."
BRIAN: "That's what it is."
VERNON: "Alright, that's it."

Mixed Figures

(Note that although some mixing is found in the individual figure groupings, the "mixed" figures here are relatively stronger, containing mixtures of at least three types.)

ALLISON: "It's kind of a double-edged sword, isn't it?" (rhetorical question, understatement, idiom, metaphor).
BENDER: "Oh and wouldn't that be a bite, missing a whole wrestling meet" (irony, metaphor, rhetorical question).
VERNON: "I've got you for the rest of your natural born life if you don't watch your step!" (hyperbole, metaphor, idiom, metonymy).
BENDER: "Although you'd probably have to ride in the back seat, 'cause his nuts would ride shotgun" (metaphor, hyperbole, idiom).
BENDER: "Well, Brian's trying to tell me that in addition to the number of girls in the Niagara Falls area, that presently you and he are riding the hobby horse!" (irony, metaphor, euphemism).
VERNON: "Ah, ah, ah grab some wood there, bub!" (metonymy, unintended double entendre – resulting in situational irony).
BENDER: "Hey, how come Andrew gets to get up? If he gets up, we'll all get up; it'll be anarchy!" (rhetorical question, hyperbole, irony).
CLAIRE: "You don't say anything all day, and then when you open your mouth … you unload all these tremendous lies all over me" (hyperbole, metonymy, metaphor).

BENDER: "Does Barry Manilow know you raid his wardrobe?" (rhetorical question, irony, metonymy).
BENDER: "Show Dick some respect!" (irony, metaphor, double entendre).

The figurative language in these lines represents several kinds studied frequently by psychologists, linguists, and other language scholars. Most of this research has focused on an important and as yet unresolved question of how people comprehend language such as this, where speaker intentions and the language used are distal in various ways.[1] Another somewhat lesser-studied question, perhaps oddly, is frequently posed by non-academic-language users and happens to be the title of this chapter and in part motivates this book – *why don't people [just] say what they mean*?

People use figurative language all the time. Our conversations and writings are packed with it. We usually comprehend it on the fly with little difficulty. Occasionally, though, our ears will miss something, and confusion will happen. Other times people *do* comprehend figurative utterances, but their interpretations are different from or indeed completely opposite of the ones intended by the speaker or writer, as in misunderstanding the sarcastic comment, "I couldn't be better," spoken by a depressed person as positive. In still other instances, people comprehend absolutely nothing from figurative language, perhaps as in novel metaphors used in poetry, but they see it for what it is and uncaringly (or even without noticing) continue on to other things. Why would we then talk or write this way if confusion, misinterpretation, utter lack of comprehension, or outright dismissal can readily happen, especially when more direct language is available?

The short answer is that figurative language provides a lot of bang for its buck (*idiom*). Figurative language expresses meaning beyond its correct figurative interpretation – *correctly* understanding "I couldn't be better" as *negative* when spoken by someone feeling miserable (*verbal irony*). This extra meaning includes all kinds of things (*hyperbole*), such as speaker attitudes and emotions, contextual enhancements and elaborations, social revelations and influences, and new meanings arising from interactions between or among these things. Extra meaning also arises from the *structures* of the figures themselves, as in the belittlement expressed by minimalist asyndeton (e.g., "Been there, done that"). But how is this possible? How can language that demonstrably disconnects with speaker-intended meaning somehow achieve *more* meaning (*rhetorical question*)?

Language essentially does this through complex meaning mechanisms found throughout linguistic use and comprehension. But the mechanisms are concentrated particularly in figurative forms, whose delineation constitutes the primary content of this book. These mechanisms allow mouths

and hands to share hearts and minds (*metonymy*) and usually *without our noticing* – as hearers and even speakers. Indeed, one tiny bit (*understatement*) of the motivation driving the question "Why don't people just say what they mean?" is this lack of *apparentness* of figurative language in normal everyday talk and text. People just don't see it for what it is (*colloquial tautology*). They don't see how drenched (*metaphor*) normal language is with figures and indirectness and all that those forms accomplish. People instead focus on rarer instances where a perhaps novel figurative usage goes awry and then accordingly question why it is there. By way of illustrating figurative transparency, each of the figures explicitly labeled in this and the preceding paragraph are also present in the much shorter paragraph preceding them.

BRIEF OVERVIEW

The book attempts to provide the *long* answer to the rhetorical question in this chapter's title. It considers the wide array of figurative kinds of language to delineate different ways in which figurative and other language accomplishes complex additional meanings for speakers and writers. In so doing, it first addresses the basic question of what this additional complex meaning *is* (Chapter 2). It then discusses the myriad of *types* of these meanings, including which kinds of figurative language accomplish them and *how* (Chapter 3). Chapter 4 then treats factors surrounding how *people* use figurative language to leverage these meanings. Particular focus is given to how much people attend to what they and their interlocutors know when using figurative language and how this interacts with different kinds of figures. Other *delivery* factors concerning how to present figurative language to maximize its additional meaning output are also considered. A discussion of the *prevalence* of figurative language usage and its leveraged additional meanings, along with *limitations* and potential *expansion* of those additional meanings, is provided in Chapter 5. Chapter 6 then brings together the themes of the preceding chapters and offers several take-home messages for future research on figurative and indirect (and, indeed, all language) usage. To prepare the stage for this discussion, several of these themes need to be briefly introduced and a couple of caveats presented to corral the issues detailed in forthcoming chapters.

INTRODUCTION OF THEMES

Five primary ideas will emerge across subsequent chapters. One appears right away in Chapter 2 concerning the nature of the "additional complex

meaning" termed thus far in the use of figurative language – the notion of a *pragmatic effect*. The latter four ideas can help to orient progress through Chapters 2 through 5 but will become most prominent in Chapter 6. These involve (1) the role that varieties of *psychological phenomena* play in language processing – predominantly for figurative language but not isolated to it; (2) figurative language use and comprehension as a *social phenomenon*; and (3) approaches for dealing with the *complexity* of figurative cognition and the impact of *broad discourse content* on identification of local isolated figures. This latter theme is introduced at the end of this chapter (see the section entitled, "A Final Theme: Rorschach Figures").

Pragmatic Meaning and Pragmatic Effects

The term *pragmatic effect* is used henceforth to refer to "additional complex meaning," as described so far, accomplished by a speaker's use of figurative language.[2] Fuller delineation of how this term and its scope of meaning are similar to and different from other accounts of pragmatic meaning is provided in Chapter 2. For now, just a brief outline of the term is provided.

An enormous amount of theoretical and empirical work has gone into investigating definitional and procedural components of semantic meaning, pragmatic meaning, interfaces between them, and how these meanings connect with many other related notions and levels of language (e.g., utterance meaning, said meaning, implied meaning, sentence meaning, speaker meaning, lexical meaning, morphological meaning, etc.). Nothing definitive is necessarily intended here in the current use of *pragmatic effect* to delineate between semantic and pragmatic meaning. Nor is some major new or different theoretical aspect of these phenomena being proposed or invented.[3] And indeed, some degree of tolerance of vagueness in use of the term is sought in this explication, as it pertains to the goals of this work.

This exploration of pragmatic effects is not aimed at further hashing out definitional issues involved in figurative meaning, if indeed definitional issues can ever be completely resolved. Nor is it meant to delineate between *comprehension* versus *interpretation* – another distinction without a universally agreed-on boundary. Moreover, as will hopefully become apparent, pragmatic effects can arise from either of these general notions and indeed from mental processes separate from them. Rather, the present focus is on the richness of human mental and related internal activity that is meaningful for a speaker and that accompanies a hearer hearing (and

reader reading, speaker speaking, and writer writing), figurative or indirect language, that might exceed a person's hearing (reading, speaking, writing, etc.) nonfigurative/direct language.

Even these figurative/nonfigurative categories are admittedly difficult to delineate precisely (see later). Lesser-figurative language also can occasionally convey more rich meaning than more-figurative language – pragmatic effects are not exclusive to figurative language. But one reason for figurative language's existence is how it leverages such mental/internal activity in people conversing relative to something usually less figurative – as the forthcoming chapters will hopefully demonstrate. Thus the term *pragmatic effect* is meant loosely as a reference to mental/internal activity taking place in a person, traceable to his or her encountering figurative as well as other language, usually when receiving it (e.g., as an addressee, hearer, overhearer, reader, etc.) but also when he or she produces or even thinks about it.

Psychology and Pragmatics

Psychological processes span from lower-level physiological and sensory operations to multiple higher mechanisms in cognitive, emotional, social, developmental, and even personality and clinical psychology. An argument will be made in Chapter 6 that far too little attention has been given to the impact these processes have on purportedly encapsulated language comprehension and production. A new approach is needed to better incorporate psychological processes at large into narrower language cognition explanations, for figurative language, as argued here, as well as for all language processing in general.

To preview, many psychological processes are invoked by triggers in language processing per se and other things that accompany or precede it. Many of these processes are automatic to a degree, fast, and powerful such that they can interact with and even override ongoing language processing to influence outcoming language products (e.g., comprehensions and productions). Continuing research on figurative language thus needs to attend more fully to the totality of the minds doing this meaning making in both production and comprehension and how those minds work across multiple domains to adequately explain the linguistic phenomena involved. Processes such as low-level language processing are not fully encapsulated (Katz 2005; Spotorno & Noveck 2014). They are instead affected by many aspects of the state of the mind-body system doing the processing work.

Figurative Language as a Complex Social Phenomenon

Related to the call for a greater embrace of psychological and other influences in explanations of language comprehension and use, the fact that language takes place between highly social beings with multiple other interaction systems connecting them is crucial. Not only do we converse, but we also emote, empathize, love, hate, dismiss, resist, align, cleave, attract, and repel among one another using systems that long preceded and currently parallel linguistic communion.[4] These systems interact in complex ways to affect processes and products of language comprehension and production. Moreover, this social aspect of language accords many more concerns for researchers wishing to explain figurative language use and comprehension because talk between people is not just a means of information exchange between interlocutors. Rather, talk is a full-blown performance, display, and propaganda system that orients speakers and hearers amid the complex social structures they inhabit, occasionally elevating a person's status in a social hierarchy and also lowering it. Thus, *that* figurative and other language operates on these levels and *how* it does so also need better explication.

Complexity Approaches

This complex tangle of human interaction systems calls for adoption of models of representation and, to an extent, prediction that embrace multiple interacting inputs as well as constraints and affordances on output that often supersede current relatively simple causal models of communication functioning. Approaches to figurative language based on constraint satisfaction (Campbell & Katz 2012; Pexman 2008), dynamical systems (Gibbs & Colston 2012; Gibbs & van Orden 2012), or other elaborate multivariate accounting hold promise at juggling this complexity because they are designed to provide probabilistic outcome estimates based on a range of interacting input parameters.

CAVEATS

Two brief caveats on the overall treatment given to figurative language and its pragmatic effects are warranted here given the different disciplines in which researchers on figurative language reside. Values placed on *types of data* in linguistic, psycholinguistic, and psychological research, among other fields, differ according to one's home discipline and subarea. Concerns

regarding *criticism in cross-disciplinary endeavors* are also raised in part because of varying familiarity with different disciplines' methods, values, and backgrounds, as well as simple differences in strengths. A third caveat concerning how to talk about figurative versus nonfigurative language in general is also presented.

Pop Goes the Examples

Whether one is a linguist studying sound patterns in sarcasm pronunciation versus proverbial forms in indigenous languages or a psychologist studying lexical choices in idiom alteration versus multimodal expressions of metaphor, one's unit(s) of analysis and how to measure it differ. People within and across disciplines simply use and respect different kinds of data. Given the focus in this book on nuances of figurative language usage and wide interdisciplinary interest in that topic, it is important for readers to see findings from a range of scientific approaches in the studies presented. Readers also need access to rich examples of figures and pragmatic effects from a variety of sources for deeper and easier conceptualization of the phenomena treated. A mixture of studies from linguistics, psychology, and other fields is thus presented without overdue attention to specific methodologies and analysis techniques in any one field to enable cross-disciplinary discussion.

For the examples presented, types and tokens from authentic broad corpora, single-instance recorded, or observed real instances of both text and talk provide one source of figurative phenomenon demonstration. For illustrative purposes, though, many other examples are culled from popular culture or invented altogether to demonstrate a particular point. These examples obviously may be caricaturized, staged, over- or undersimplified, or in many other ways different from more authentic figurative language usage in real contexts. But their possible caricature status – enhancement of particular signature characteristics and especially their familiarity and/or accessibility through the Internet or other sources – makes them very useful as illustrative examples to demonstrate figure structure, figurative usage, blending, pragmatic effect accomplishment, and other processes. This book thus presents instances of figurative and other language usage from popular, predominantly North American novels, movies, television programs, Internet videos, songs, advertisements, and other sources in both talk and text. These are not offered as data per se, and their noted possible differences from in-the-moment spoken figurative language and authentic written communications

should be kept in mind. However, their vividness and ready-sharedness across diverse reader constituencies present advantages that can offset concerns about genuineness.

Problems with Problems

Related to but separable from differing values on evidence, people in different disciplines and their subareas also vary in their acceptance of critical analysis of previous work. One subdiscipline may criticize another for not attending to concerns in its field. Linguists or psychologists using experiments with experimenter-crafted language items, for instance, may criticize other researchers for not attending to sampling, causal-effect isolation, or generalizabilty. Conversely, experimentalists may be criticized for lack of item authenticity, for transparently staged comparisons, or for use of artificial or narrow language, settings, and tasks.

The point for purposes vis-à-vis this book is that each chapter, after opening with a brief presentation of the topic involved (i.e., prevalences of figurative language in broad populations of speakers and writers), follows with a lengthy treatment of the methodological and other problems involved in addressing that topic before then reporting and discussing the status of different findings and some new ideas. These critiques are offered in the spirit of addressing the problems at hand (i.e., how to quantify the amount of metaphor in a corpus). But they will likely nonetheless reflect disciplinary familiarity and experience. Such criticism is not intended to argue for one disciplinary approach or methodology over another. Indeed, no approach, method, or measure is infallible. All have limitations. Rather, it is hoped that the criticism will spur recognition of the need for more interdisciplinary cross talk and collaboration, including scholars reading, attending conferences, and holding discussions out of their scholarly comfort zones. Attending to criticisms of accepted approaches in their home disciplines and perhaps, especially, conducting and presenting studies using mixed approaches and methodologies (i.e., corpus and experimental analyses published/presented in tandem; see Giora et al. 2013) are thus implicit advocations.

Figurative Name Calling

The final caveat concerns use of the terms *figurative* and *nonfigurative*. Although a case has been made for the advantages of the term *nonfigurative* over *literal* (Gibbs & Colston 2012), and this book will adopt that

practice, along with regular usage of the term *figurative*, problems remain with attempted delineation between these as categories. Many presumed figurative utterances are difficult to categorize into subsets of known figurative types. Many supposed nonfigurative utterances also may be borderline figurative.

One need only look at the examples at the beginning of this chapter to see this. The first rhetorical question by Claire contains an extreme-case formulation that gives it a flavor of hyperbole. The second idiom by Andrew has hints of both understatement and hyperbole. The second irony example from Bender could be metonymic and hyperbolic, and its use of diminutivization could be a second source of subtle irony. All three of these delicate suggestions or invocations of figurative mechanisms, plus many others, also can be found easily in what most people would take as nonfigurative language.

A FINAL THEME: RORSCHACH FIGURES

A final theme is worthy of independent mention here because it pertains particularly to the preceding brief point on distinguishing figurative and nonfigurative language. Some instances of figurative language may become apparent only when considered amid the broader discourse contexts from which they are taken. If considered in isolation as a brief phrase or sentence, their figurativeness can be shrouded – ambiguities in surface form may not clearly indicate the figurativeness. However, if the broader discourse is allowed to project down on the smaller snippet contained within, figurativeness can emerge. These instances are accordingly termed *Rorschach figures*.

A further example from *The Breakfast Club* is illustrative: consider the target utterance (1.3) by Vernon that follows. This comment can be traced to an earlier event where Bender (the "criminal") surreptitiously removed a screw from a door between Vernon's office and the detention room so that the door would not stay open. Vernon discovers this and angrily accuses Bender of removing the screw. Bender denies the act, so Vernon threatens to shake the screw out of him and then insults Bender, saying that he'll be the next screw to fall out.

A very angry sequence of exchanges between Vernon and Bender then occurs in which Vernon systematically increases the number of subsequent detention days in response to increasingly angry and figurative comments from Bender. These begin with Bender first mumbling, "Eat my shorts," and then saying it pointedly to Vernon. They end with Bender saying, "You

really think I give a shit?" Finally, Bender ceases pushing back and is obviously furious, and a bit dejected, at Vernon especially but perhaps also at himself for having gotten stuck with two more months of weekend detention. Bender then salvos two final figurative comments in rapid sequence, responding to Vernon's gloating that he *had* Bender for two months ("I gotcha"). The first is delivered in a very snide tone; the second with fury. Vernon then responds also angrily (Vernon's response is the target utterance).

BENDER: "What can I say?" (1.1)
"I'm thrilled!" (1.2)
VERNON: "Oh, I'm sure that's exactly what you want these people to believe." (1.3)

Comment (1.1), a colloquial American English rhetorical question, is normally used as an expression of resignation – a speaker utters the expression typically to neutrally note the existence of a referent situation and to show acceptance of its status without protest and/or that nothing can be done to change things. The comment, however, also can be used ironically in two ways. In one, the speaker *pretends* that she is resigned to and feels neutrally about the referent status but actually is happy about it (e.g., as if delivered gloatingly or arrogantly with chin held high and a self-satisfied smile). Bender uses the second way – pretending that he is resigned when he is actually furious. In both cases, the pretended perspective is carried by the language (and, interestingly, its standard figurative meaning from a colloquialized rhetorical question), but the speaker's genuine feeling is shown by emotion, facial expression, and prosody.

Comment (1.2) is a standard sarcastic verbal irony – saying something positive about something negative. The comment pretends to find the situation positive but ironically negates that stance to actually express negativity about it. Here also the pretended portion is in the language, and the honest feeling is in the emotion/prosody/etc.

Bender is thus ironizing two perspectives in quick succession. The first is that he is neutrally okay with two more months of detention. The second is that he is happy about the punishment. All of this is to ironically show that he is neither resigned nor happy but actually dejected and furious.

Vernon's response (1.3), interestingly, may not seem ironic on the surface, especially if viewed in relative isolation – as only a response to Bender's previous remarks (1.1 and 1.2). Vernon has just heard Bender state that he is effectively nonplussed (1.1) and happy (1.2). It is clear that these things are not true. So Vernon has the perspective that Bender is lying or attempting to lie and failing. Vernon is also confident that he is correct in

this observation. Thus his statement (1.3) may simply reflect this – he is confident that Bender is trying to get the others to think that he is at ease with or happy about the added detention. Vernon does use a few standard verbal irony markers (e.g., extreme case formulations, emphases added, "I'm *sure* …," "that's *exactly* …"), but they do not seem to readily map onto irony. One thus could argue that they do not raise the comment to irony status. "I'm sure …" may just express Vernon's confidence in his observation, and "that's exactly …" may just note the precision of what Bender is seeking to convey.

But Vernon's interpretation of Bender's comments (1.1 and 1.2) as attempted lies, along with knowledge about both Vernon's and Bender's personalities, their feelings toward one another, and the deeper history, indicated and schematic/stereotypical information triggered by the longer previous discourse, indeed going back to the beginning of the film, may in fact demonstrate Vernon's response as subtly ironic. Moreover, Vernon's ironizing Bender's *motivation* in using comments (1.1) and (1.2) may be a case of a subtle verbal irony *embedded within dramatic irony*.

For the verbal irony, Vernon's expression in comment (1.3) could be making fun of what he sees as Bender's weak facade. According to Vernon, Bender is deeply upset and hurt at his punishment but is trying to convince the others that he is not. So Bender puts up statements saying that he is nonplussed and indeed happy about the situation, even if his delivery obviously reveals his true feelings. Vernon sees this as a lame attempt. Vernon's personality, as revealed in the discourses leading up to this scene, bears on this – Vernon is not a man of great depth, empathy, or insight. Or at least he doesn't practice these qualities. He bitterly sees only the surface form of people, their expressions, and behavior and usually takes a negative interpretation of them when other understandings are available. All of this is because Vernon views young people with contempt. Young people in Vernon's view are nothing but a rebellious mob challenging his social power, strength, and desire to maintain discipline.

Thus Vernon's rebuttal to Bender may instead be his seeing only the simplest, and worst, motivation Bender might have – lying and, in not liking Bender's supposed dishonesty, seeking to ironize it. Vernon achieves this through an ever so slightly feigned agreement that convincing the others with comments (1.1) and (1.2) is viable and that Bender's motivation to do so is commendable. The extreme-case formulations now fit nicely – "I'm sure …" hints that the likelihood that others will be convinced by Bender's comments is high, and "… that's exactly" commends the quality of what Bender is seeking to convey. In this pretense, though, Vernon reveals his true belief

that Bender's statements have no chance of convincing the others and that his motivation is instead pathetic.

In an isolated sense, Vernon is right about this. Bender is indeed telegraphing the message that he is resigned and happy, and no one is likely to believe this. But Vernon greatly misses the bigger picture. Bender's use of verbal irony *isn't* an attempt to masquerade as a person happy with his lot. It's instead a complex way of saying that he's *not* happy by ironically negating the idea that he *is* happy. This is apparent by Bender's obvious emotional displays and clear intelligence in using language.

All told, therefore, Vernon's response is to belittle only the portion of Bender's broader expression system that Vernon can see – the resignation/happiness statements – which Vernon thinks Bender is genuinely trying to pass as counterfeit. This makes Vernon's response (1.3) also a case of tragic irony – Vernon thinks one thing is going on when something contradictory (and larger) is going on instead, to which Vernon is oblivious. Vernon is claiming that Bender is being dishonest when, in fact, Bender is expressing the truth.

Two important points from this example are worth emphasizing. The first is how the emotion and multimodal cues shown by Bender are carrying half the weight of his irony – he's clearly furious and despondent but says (ironically) that he is resigned and happy (1.1 and 1.2). So all the nonlinguistic indications of emotion and stance are very much a part of what Bender is ultimately saying and interact deeply with the linguistic processing taking place – emotions and nonverbal cues are things we process very deeply and quickly.

The second point is the broader discourse and contextual impact on narrower individual turns. To understand even that Vernon is being ironic in comment (1.3), as well as the invalidity revealed in the narrowness of that expression and the broader dramatic irony it creates, one must really look at content in the broader previous discourse and the overall context. Otherwise, Vernon's supposed nonfigurative assertion that Bender is simply faking happiness to the other people when he really feels otherwise might seem accurate, might seem to reveal Bender's dishonesty, might seem aligned with Vernon's supposed objectively nonfigurative statement, and might seem the end of the story. When viewed in the broader sense of Bender's life, obvious intelligence, sense of inequity, means of expression, and ultimate honesty, however, along with Vernon's bitterness, prejudices, and narrowness of view and the longer and shorter history between these two people, then the verbal and tragic ironies become apparent.

2

What Is a Pragmatic Effect? Multidisciplinarity and Scope

Chapter 1 introduced the concept of a *pragmatic effect* and discussed how many related notions have been proposed in past research on figurative and indirect language. Reviewing this literature on analogues of pragmatic effects involves difficulties stemming from the multidisciplinarity of the work as well as the scope of the consideration. One main issue is that a great deal of empirical research has been conducted and theoretical claims proposed that might fall under the umbrella of pragmatic effects in figurative or indirect language. But they were not necessarily called that or were not specifically focused on the goals of identifying, delineating, explaining, or verifying specific pragmatic effects across a wide range of figurative forms. Rather, they were somewhat parallel or even incidental measurements and/or discussions of something like pragmatic effects, along with some other, more central or broader theoretical or empirical goals in mind. This work comes from an array of allied subfields studying language and cognition and extends far back in time, indeed to the initial philosophical treatments on methods in rhetoric, for instance, the use of indirect questions or Socratic irony to catalyze thinking (Vlastos 1991).

Another issue is the proliferation of terms used to discuss pragmatic effects. Among these are terms used in modern specific empirical studies of people's figurative language usage such as *social functions* (Anolli, Ciceri & Infantino 2002; Dews & Winner 1995; Harris & Pexman 2003), *discourse goals* (Colston & Lee 2004; Hancock 2004; Harris & Mosier 1999; Harris et al. 2006; Kreuz 2000; Roberts & Kreuz 1994), *pragmatic functions* or *pragmatic effects* (Colston 2000a, 2002b; Colston & O'Brien 2000a, b; Pexman & Zvaigzne 2004), and *communicative goals* (Kreuz, Long & Church 1991; Long, Kreuz & Church 1989). Still other, more

general modern theoretical constructs have not been explicitly labeled pragmatic effects, but they describe something similar. These include, again among others, constructs such as *generalized* or *particularized implicatures* (Grice 1975), *weak* or *strong implicatures* (Sperber & Wilson 1986), *m-intended* or *authorized inferences* (Clark 1977; Grice 1968), *elaborative inferences* (Garnham 1982; O'Brien et al. 1988; Singer & Remillard 2004), *conceptual blended spaces* (Coulson 2001), *contextual effects*, *cognitive effects*, or *positive cognitive effects* (Sperber & Wilson 1986, 1995; Wilson & Sperber 2012), and *abductively produced interpretative hypotheses* (Dascal 2003).

How might one designate between these beyond-the-text/talk or at least presumed as such, pragmatic, and figurative meanings as opposed to the treatment presented here of pragmatic effects? This diversity of terms also raises the thorny issue of just what a pragmatic effect *is*. Are all the different studies and theoretical debates referring to the same or very similar phenomena but with different terms? Or are the phenomena discussed with these specific and general ideas themselves different, diverse, and highly varied?

Still another issue is whether one wants to limit the discussion to studies specifically and empirically addressing the psychological reality of claimed pragmatic effects, with perhaps a further limiting to pragmatic effects whose functioning has been empirically validated. Or should the larger array of explicitly and implicitly claimed pragmatic effects that might reasonably get produced by speakers using figurative/indirect language but that have not undergone specific empirical evaluation be included?

A final issue is whether one is talking about pragmatic effects that might be produced by the entire array of kinds of language termed *figurative* or at least *indirect*. Or should the discussion be limited to pragmatic effects produced by only one type (hyperbole) or one family of types (metonymy) of figurative/indirect language? Related to this is whether a given pragmatic effect for a figure occurs every time that particular figure/indirectness is encountered or only under certain circumstances. This last issue stems from the ultimate question of what causes pragmatic effects in figurative/indirect language.

The following two chapters attempt to sort through these questions regarding pragmatic effects in figurative/indirect language use and comprehension. The topics are organized roughly around the issues discussed earlier, including the definition, scope, and account similarity (Chapter 2), as well as designation, reliability, and cause, of different pragmatic effects

in figurative/indirect language use (Chapter 3). To begin, first consider an example empirical study from psychology on pragmatic effects in figurative/indirect language use.

PRAGMATIC EFFECTS: A CASE STUDY

Despite the difficulty discussed earlier in establishing a starting position for reviewing pragmatic effects in figurative/indirect language, one point of departure may nonetheless be Roberts and Kreuz's (1994) empirical investigation into why people would use a variety of kinds of figurative/indirect language. This work was part of an outgrowth of research on figurative language in the 1990s that began to look with empirical methodologies at an array of specific pragmatic effects in figurative language use. Prior to this research, the focus had been on, at least in most psycholinguistic empirically based and linguistic and philosophical theoretically oriented research, (1) how figurative language is comprehended by hearers or readers given the purported disconnect between what is said by a speaker/writer and what is communicatively intended and (2) debates about the general mechanism(s) for computing pragmatic meanings in comprehension/interpretation.

Roberts and Kreuz instead directly asked the related but separable empirical question of why would speakers talk (or writers write) using a variety of different figurative forms. The aforementioned supposed disconnect in figurative language between what is said and what is intended supplied the motivation for the question – if figurative language is not a direct statement of a speaker's/writer's meaning, then it arguably poses a greater risk for misinterpretation. A number of costs are involved in misinterpretation, as the argument goes, so some benefits ought to exist to offset those costs. Otherwise, figurative language use has no motivating reasons. It should be noted that no universal agreement currently holds on this argument that figurativeness is necessarily more potentially misinterpretable. The difficult-to-define difference between figurative and so-called literal language and other issues such as the argued lack of "special" processes for figurative language comprehension (Gibbs & Colston 2012) complicate the debate about figurative exceptionalism. But the argument was nonetheless used to motivate the study.

Roberts and Kreuz provided their study participants with ten examples each of eight kinds of figurative (or at least indirect) language: hyperbole, idioms, indirect requests, irony, understatement, metaphor, rhetorical

questions, and similes. The participants were asked first to read the examples, then to generate other examples of those figures on their own, and finally to list reasons why individuals might use the particular forms in a discourse. The responses to the latter motivation question then were organized into a taxonomy of discourse goals, and a calculation of the degree of overlap among these reasons was made.

This work has been cited extensively by researchers conducting subsequent specific empirical research addressing why people would use different kinds of figurative language. It empirically demarked the wide range of goals that actual native speakers (of American English) report are accomplished by varieties of figurative language. It also measured the varying extent to which each figure accomplishes each goal. It additionally demonstrated the ranging degree of overlap in what different figures were reported to accomplish.

The findings overall revealed a great deal of subtlety and diversity in what different figures accomplish. Seemingly unrelated figures, for instance, were often shown to accomplish similar goals. Irony and simile as one example had a relatively high overlap score of 0.52 (the absolute range of this score is between 0 for no overlap in accomplished goals and 1 for perfect overlap; see Graesser [1981] for an explanation of how these scores are calculated). The figures also were shown to each accomplish a large number of different goals. Indeed, of the total number of nineteen unique discourse goals reported for all the figures (not including miscellaneous goals collectively labeled "other"), the average number of goals accomplished by the figures was 14.6 (77 percent of all the possible goals). This diversity also was shared by the figures rather than being concentrated on only a few highly multipurpose ones (the range was twelve to eighteen goals per figure, or 63 to 95 percent of all goals mentioned).

Although this subtlety and diversity of functioning of figures are quite interesting in their own right, they can nonetheless shroud deeper patterns in what figures primarily or most strongly accomplish. Thus, for present purposes, a brief reanalysis of the findings of Roberts and Kreuz (1994) is provided with a truncation that focuses only on the goals for which a high degree of agreement existed among the study participants concerning which figures achieve which goals. The discussion is then limited to figures for which more than 50 percent of the study participants reported a given goal was accomplished.

An interesting pattern emerges when figures and discourse goals are viewed with this truncation. The discourse goals that at least half the

participants said were performed by at least one kind of figurative language were as follows:

Goal	Figure
To clarify	Simile (94%), metaphor (82%), hyperbole (83%), rhetorical question (72%)
To show negative emotion	Irony (94%), understatement (69%), rhetorical question (56%)
To be humorous	Irony, (65%), hyperbole (61%)
To deemphasize	Understatement (75%)
To add interest	Metaphor (71%)
To emphasize	Hyperbole (67%)
To be polite	Indirect request (64%)
To guide another's actions	Indirect requests (64%)
To protect self	Indirect request (57%)

Organized differently, the figures that at least half the participants said accomplished a discourse goal(s) are as follows (for present purposes, metaphor and simile are combined):

Figure	Goal
Metaphor/simile	To clarify (94% simile), to clarify (82% metaphor), to add interest (71% metaphor)
Hyperbole	To clarify (83%), to emphasize (67%), to be humorous (61%)
Indirect requests	To guide another's actions (64%), to be polite (64%), to protect self (61%)
Irony	To show negative emotion (94%), to be humorous (65%)
Understatement	To show negative emotion (69%), to deemphasize (75%)
Rhetorical question	To show negative emotion (56%), to clarify (72%)

Looking at the first arrangement of the findings, it is apparent that *clarification*, *expression of negative emotion*, and *humor* are the most diversely performed discourse goals if one considers that they are performed by multiple figures. The other discourse goals are more tightly linked to only one figure.

From the second arrangement, it appears the most diverse figures in terms of multiple goal performance are *metaphor/simile*, *hyperbole*, and *indirect requests*. Each of these performs three different, although related (see later), goals. Irony, understatement, and rhetorical questions are more limited in that they are related with a narrower range – each is reported to perform two primary goals.

The broader picture, though, from this reanalysis of the findings of Roberts and Kreuz is that three emergent metadiscourse goals seem to be performed by these figures, demonstrated in the spacing of the lines in the second arrangement of the findings.

Expressing negativity, although nuanced by couplings with other functions, is shared by *irony*, *understatement*, and *rhetorical questions*. This degree of shared functioning is also shown by the overlap matrix provided by Roberts and Kreuz. Overlap scores among pairs of these three figures range from 0.57 to 0.64 (to illustrate the range of overlap among all the figures measured, the highest overlap score between any two figures was 0.71, and the lowest was 0.15, of a possible range of 0 to 1 – note that these overlap scores also were calculated without the present truncation, so they include all the goals reported as accomplished by the figures, but they still corroborate the present selections). This grouping is not surprising given that many taxonomies of ironic figures put irony (as defined by Roberts and Kreuz), understatement, and rhetorical questions under the broader umbrella of *verbal irony* (see Gibbs & Colston 2007a). But the present findings make this combination through the discourse goals the figures share rather than by some other theoretical or definitional criterion.

Enrichment or emphasis of meaning, although also nuanced by other functions, was shared by *metaphor/simile* and *hyperbole*. The overlap scores of these figures also were relatively high (ranging from 0.63 to 0.71). Again, it should not be surprising to see metaphor and simile included here given their highly similar structure. That hyperbole is included is primarily because of the shared function of clarification. Hyperbole and metaphor/simile, however, might separate somewhat as subfamilies in that the additional functions they perform diverge into making a point (hyperbole also emphasizes and is funny) versus enriching meaning (metaphor also adds interest), which, although obviously related, can be different. But metaphor/simile and hyperbole share the broader capacity to enhance or enrich the meaning being expressed.

Finally, *effective guidance of action in other people* was strongly accomplished by *indirect requests*. Indirect requests combine the goals of affecting activity in other people (*to guide another's actions*) and being nice to other people (*to be polite*) without sacrificing one's own face or needs (*to protect oneself*). It is also sensible that these goals cluster given compliance – addressees are more likely to participate in an action (e.g., when requested to do something) when they are treated well versus being coerced, as well as when the requestor is seen favorably.

The differentiation of these three broad categories is also supported by comparing the overlap scores of figures within versus between the three categories. Within the categories (1) *expressing negativity* and (2) *enrichment or emphasis of meaning* (only one figure is in the third category – *effective guidance of action in other people*), the range of overlap scores between pairs of figures is 0.57 to 0.67 (the maximum in the range rises to 0.71 if one includes the metaphor and simile comparison), for an average overlap score of 0.64. But among the three categories, the overlap scores between pairs of figures range from 0.15 to 0.64, for an average score of 0.33 – roughly half as much shared functioning as figures within the three categories.

Of course, other goals are accomplished by multiple figures (e.g., humor is accomplished by both hyperbole and irony), as was also the case without the truncation and thus with lower levels of agreement by the study participants (e.g., provoking thought was accomplished by both irony [29 percent of participants said this] and metaphor [35 percent]). But these goals by themselves do not fit as readily into individual broader accounts of interpersonal interaction. For instance, although humor and provoking thought are certainly valuable discourse goals that can, on occasion, be the sole sought-after end product of an utterance of figurative language, they usually are used as a means to a broader psychological end, or they are highly diverse in contributing to multiple psychological ends. Humor, for example, can increase intimacy between interlocutors, put an addressee at ease, and save face by offsetting the deliverance of a criticism. For provoking thought, a broader goal could be getting a person to realize some richer or subtly intended meaning, perhaps for persuasive purposes, with the use of a figurative utterance.

The truncation, however, which included only figures whose accomplished goals were reported with high consensus among the participants, has revealed what seem to be goals that nicely fit with broad, widely accepted psychological, social, linguistic, or philosophical theories concerning interpersonal interactions. They also cohere with situations within these theories where indirectness is warranted.

For the three metagoals pulled from these findings, *expressing negativity* is potentially face threatening (Brown & Levinson 1987). It thus supplies a natural arena for figurative language that can indirectly deliver negativity (rhetorical questions), balance negativity with positive content (irony), or camouflage negativity for easier delivery (understatement).

Emphasizing or enriching meaning is powerfully accomplished by figurative mechanisms that can bring attention to expectation/reality discrepancies by inflating them (hyperbole; see Colston & Keller 1998) or by a host

of claimed mechanisms that enrich meaning for a variety of tropes, including those involved in cross-domain mixtures (metaphor). Among the latter mechanisms are, tapping into preexisting conceptual metaphorical mappings (Gibbs 2011a, b; Lakoff & Johnson 1980; McGlone 2011; Steen 2011), affording the construction of blended conceptual spaces (Coulson 2008a, b; Coulson & Oakley 2005), using richly embodied experiences via simulations (Bergen 2012; Gibbs 2003a, b) and others (see Colston [2010] for a discussion of embodied, sensory, perceptual, cognitive, linguistic, semiotic, social, and cultural mechanisms of meaning enhancement in tropes).

Finally, *effective guidance of action in other people* also has an impact on face management issues in that shepherding or catalyzing actions on the part of other people can pose a threat to both interlocutors' faces. Figurative language that can effectively manage relevant face issues in these situations (indirect requests) are thus bound to be used for these purposes. Indirect requests have been shown to enable requesters to increase compliance and save face, in that the typical form of the indirect request demonstrates an effortful consideration on the speaker's part of the obstacle most likely in the addressee's way in granting the request. A requester typically would *not* say, for instance, "*Would you mind* if I borrowed a pencil" if the most likely reason for a refusal would be the availability of a spare pencil. Rather, the requester would say, "*Would you have* a pencil I could borrow?" because that phrasing better aligns with the obstacle and demonstrates the requester's consideration of the addressee's situation. This is a form of ingratiation that lubricates the interaction and increases compliance, leaving both parties maximally satisfied (Gibbs 1981a, b, 1983, 1986b).

This brief treatment of measured narrow and emergent theoretically relevant pragmatic effects from the Roberts and Kreuz (1994) study demonstrates some of the issues raised at the beginning of this chapter. The study revealed one way in which particular pragmatic effects thought to be achieved by kinds of figurative language can be empirically evaluated. The study also addressed discourse goals that might be accomplished by figurative language as a whole – "to emphasize," "to clarify," and "to show positive emotion," for example, were reported as being performed by all the figures measured. Discourse goals performed by only a subset or one specific kind of figurative language also were revealed – "to deemphasize" was performed by half the figures measured, and "to compare similarities" was performed only by metaphor and simile. This treatment also at least raised the issue concerning the definition of and terminology used to discuss pragmatic effects in figurative language.

As revealed by the distillation of the three metadiscourse goals (*expressing negativity*, *emphasizing or enriching meaning*, and *effective guidance*

of action in other people), the Roberts and Kreuz study did not, however, explicitly discuss *how* the discourse goals they collected fit into broader interpersonal, social, or pragmatic theories. Nor did it elaborate on what a "discourse goal" is, nor how it might be caused (these were not among the goals of the study). Rather, speakers were merely asked to supply "reasons [for] why an individual might use [a kind of figurative language]." Whether these "reasons for use" align with other discussions of the array of phenomena falling under the present term *pragmatic effects* is not yet clear. For discussion of this issue, consider first the question of what discourse goals or pragmatic effects actually are. The question of whether there might be pragmatic effects outside of existing psychological, linguistic, and philosophical use/comprehension accounts is then taken up afterward.

DEFINING A PRAGMATIC EFFECT

As discussed earlier, two distinguishable sources are available for seeking parallel ideas about pragmatic effects. One is the large linguistic, philosophical, and psycholinguistic theoretical literatures on figurative/indirect (and, indeed, all) language comprehension. The other is the more recent, primarily psychological and linguistic literatures that directly and often empirically evaluate pragmatic effects, typically by using similar terms such as *discourse goals*. The latter will be treated at length in Chapter 3. For now, consider some of the kinds of theoretical phenomena linguists, philosophers, psychologists, and other scholars and researchers have investigated and how they might be construed as different versions of pragmatic effects.

This is also by no means an exhaustive list of these types of accounts. Rather, a few representative accounts whose component parts seem to align particularly well with pragmatic effects as considered here were selected for consideration. These accounts, although generally well known, also will be described in some detail to later help distinguish how pragmatic effects might both overlap and differ from mechanisms proposed within these accounts.

Speech Act Theory

One of the first modern scholarly attempts to grapple not only with what is here called *pragmatic effects* in figurative/indirect language but also indeed with language use and comprehension as a whole is *speech act theory* (SAT) (Austin 1961). SAT, among many other things, attempted to separate and label portions of meaning that arise in the act of making and encountering

utterances to enable explanation of the comprehension of those utterances. These portions included meaning of the language that a speaker says, sometimes elsewhere called *literal meaning*, referred to in SAT as the *locution*. The usually broader meaning the speaker is intending to communicate by making the utterance is called the *illocution* or *illocutionary force*. Finally, and for present purposes most important, the effect the utterance has on the addressee or hearer is the *perlocution*. For example, if a speaker says to an addressee,

"Do you want to grab a beer?" (2.1)

the locution is a question asking if the addressee has the desire to physically grasp a container of beer. The illocutionary force is most likely an invitation on the speaker's part to go to some other place to drink a beer or some beers with the speaker. The perlocution would most centrally be a belief on the addressee's part that the speaker is offering that invitation to go someplace to drink a beer or beers with him or her, but it also could contain other beliefs, for instance, that the speaker is romantically or in some other way interested in the addressee, that the speaker is thirsty, that the speaker wishes to have an important conversation with the addressee, or many other potentially related meanings as warranted by the context. It also could contain other reactions on the part of the addressee (e.g., feeling welcomed).

Another attempt by SAT was to create taxonomies that divide all utterances into a fixed number of groups, with some of the distinguishing criteria based, at least in part, on what the perlocutions would be for different kinds of utterances (Searle 1969, 1975). For example, a new state of beliefs along with attitudes and emotions associated with those beliefs could be brought about in an addressee by a speaker uttering a declarative such as

"You're fired!" (2.2)

Here the addressee's perlocution would not only likely contain a belief that she is no longer employed, but it also could contain other beliefs such as that she has done something wrong, that she will not be able to pay next month's rent, that she cannot use the speaker for a future job reference, that the speaker is a jerk, and so on.

Despite this recognition of the importance of perlocutions, including the range of their extent and their potential differences from illocutionary forces, SAT still had a number of problems. The first was a general lack of agreement as to what the sets of categories for utterances should be, including that different kinds of sentence forms can belong to different and even multiple categories of speech acts (Gibbs 1999). This was a problem in part influenced by the kinds of perlocutions different speech acts could produce.

More important for our purposes was another problem with SAT concerning its general lack of precision regarding *how* perlocutions would actually happen in addressees. Portions of this latter problem also were either never satisfactorily solved (e.g., how does an addressee know which of several possible perlocutions to choose from or how does the addressee know when to stop choosing or embellishing perlocutions; see the section "Relevance Theory" later), or attempted solutions ended up not garnering empirical support. For example, in the case of indirect or figurative utterances, one solution had addressees conducting multiple comprehensions (Searle 1975, 1979). First, an initial comprehension would be made that derived the so-called pure locution of an utterance independent of lexical, syntactical, and semantic sources of information. A second comprehension then would take place on realization that the result of the first was incompatible with the context at hand. As will be mentioned at multiple points in this book, this strict two- or multistage model has repeatedly shown a lack of empirical support as a universal account of indirect or figurative language comprehension (Gibbs 1994).[1]

Despite these problems, SAT was nonetheless a groundbreaking account that attempted to describe the range of meanings that can or must arise in the mind of a comprehender when encountering an indirect or figurative utterance. Its notion of a perlocution was an important benchmark in the research leading to investigations of pragmatic effects.

Gricean Theory

A second theoretical framework that also dealt with pragmatic effects somewhat directly was the work of philosopher Paul Grice's on recognized intentions. Grice attempted to explain a speaker's making of an indirect or figurative utterance by arguing that the speaker would do so with an "m-intention." *M-intentions* are intentions that speakers have and want their addressees to recognize such that the recognition brings about certain effects in the addressees. For example, imagine a situation in which a family pet dog named Musket is sitting next to and facing an exterior door. One family member, Maria, is sitting across the room, and another person, Simone, enters from a side interior door and passes by the pet. Maria says,

"Musket, do you want to go outside?" (2.3)

In making this utterance, Maria has an m-intention to get Simone to open the door and let the dog out. It is not just an intention, as in being what Maria wants to have happen. It is additionally an m-intention because

Maria also wants Simone to recognize that this is what she wants to have happen as a means of making it happen.

M-intentions thus in some ways add the qualities of perlocutions to illocutionary forces. They are effects in addressees (or, technically, in this example, overhearers) intended on the part of speakers in making their utterances. These effects require deriving the illocutionary force behind the locution, but they also go beyond that illocutionary force. Thus, in this example, not only must Simone derive some meaning out of Maria's utterance that is broader than the locution (realizing *an offer to go outside* from *an inquiry on whether the dog has a desire to go outside*), but that meaning also involves a desired effect in Simone. In this case, this involves an action on his part (to let the dog out).

In somewhat blending perlocutions and illocutionary forces, a further construct was needed to fill the gap between an addressee deriving the intended meaning of an utterance and then exhibiting the intended perlocutionary effects brought from the speaker's use of that utterance. In this example, for instance, something is needed to account for how Simone realizes that Maria's utterance is really directing him to open the door. For this, Grice developed the idea of an implicature. An *implicature* is an inference on the part of the addressee, authorized by the speaker, to derive the speaker's m-intention and its consequences to arrive at a final comprehension.

One might first ask why a notion of implicature is necessary when the idea of an illocutionary force – again, that which the speaker intended to communicate – is already available. The main problem again is that an illocutionary force, even if expanded to include all that a speaker is authorizing the addressee to infer, does not supply a *mechanism* for how the addressee derives all that meaning. Also, SAT greatly underestimates the interactive nature of emergent meaning that plays a big role in meaning derivation. As discussed later, Grice's framework turns out to also fail at fully fixing these problems, but it goes much further than SAT did.

For our main purpose here of delineating pragmatic effects, the notion of an implicature buys a lot of ground. According to Grice's view, then, a pragmatic effect could be some meaning, belief, or knowledge that an addressee (or other kind of comprehender) infers based on a comprehension of an utterance and a context. To illustrate this with a classic example, consider the following three characters: Seth is a man who is romantically attracted to a woman named Aretha, whom he has only seen from afar. Aretha has a close friend, Min jun, who works with Seth, so Min jun and Seth are acquainted. One day Seth decides to begin pursuing Aretha, so he begins by asking Min jun if Aretha is married. Min jun replies,

"Aretha has three children." (2.4)

What would Seth comprehend from this? According to Grice's view, Seth would first derive the "literal" meaning from the utterance. But then Seth would infer, ideally in accordance with what Min jun intended him to infer, a number of things not explicitly stated in the utterance. One of these could be that Aretha is a parent of the three children. Another is that Aretha is married. That Aretha is the parent of the children and is married are not explicitly stated in the utterance, but they are reasonably inferred from the utterance.

Elaborations on Grice's basic notion of implicatures delineate this example further. One may first distinguish between strong and weak implicatures. Respectively, these involve inferences the speaker authorized or intended the addressee to make versus those that the addressee makes anyway. In this example, for instance, the inferences that Aretha is the parent of the three children and is married could be authorized. But an additional inference that Min jun is urging Seth to avoid Aretha also may be inferred by Seth but not intended by Min jun. Min jun actually could think that Aretha would be better off with Seth than with her present husband but still wish to alert Seth that Aretha is nonetheless married to alert him of the situation he is facing. Of course, it is also possible that Min jun does not intend the inference that Aretha is married. Min jun could instead simply want to let Seth know that Aretha has children and therefore might be a different type of romantic pursuit than he is imagining (e.g., that Aretha may have limited time to devote to developing a new intimate relationship given the children).

Another elaboration on implicatures concerns whether they are dependent on the local context or not. Particularized implicatures are those that depend on some aspect of the local context to happen. For example, imagine that two friends are looking forward to watching an important baseball game on television. Kara rushes to Liz's house, and when she opens the front door, Liz says,

"It's raining." (2.5)

Here no explicit statement about where it is raining is uttered. But the inference that it is raining in the city where the baseball game is being played is made possible by the context at hand.

Generalized implicatures, however, are those that can get made independent of local contexts. As just one example, consider scalar implicatures (Bott & Noveck 2004; Carston 1998; De Neys & Schaeken 2007; Levinson 2000; Noveck 2001; Noveck & Posada 2003; Papafragou & Musolino 2003;

Sperber & Wilson 1986, 1995). These implicatures involve inferences made on the use of certain quantity terms. For example, if a speaker says,

"Some of the packages have arrived." (2.6)

it is likely that hearers would infer that some of the packages also have not arrived. Note, though, that such an inference is not logically derived from what is explicitly stated in the utterance – "some," in reference to the packages that have arrived, does not automatically mean that the remainder of the packages have not arrived.

Even with these and other elaborations on the idea of implicatures, however, there remains problems with Grice's view. The biggest of these concerns the remaining issue of an implicit claim that multiple sequential interpretations would be needed for all figurative language comprehension. This problem is really a leftover from SAT. Indeed, most of the empirical studies that revealed this problem referred to a blend of Searle's and Grice's accounts with the term *standard pragmatic model* (Gibbs 1994, 2002; Grice 1975; Searle 1979).

A second problem, though, concerns how one might limit the implicatures that a comprehender would make. Grice's view does not supply a ready mechanism that would impose such a limit. A speaker interpreting example (2.5), for instance, might infer appropriately that it is raining in the city where the game is being played. But there is nothing to stop further inferences, such as therefore the game is canceled, therefore the visit invitation is rescinded, therefore I am no longer welcome, therefore I must leave now, and so on. There is no mechanism that allows for selection of which of these possible inferences the speaker intended the interpreter to draw, nor for a stop to drawing inferences. Clearly, except when people are suffering from paranoia, they do not generate inferences into infinity. They also seem readily able under normal circumstances to arrive at a set of inferences that, if not exactly what the speaker intended, seems to nonetheless approximate those intentions, allowing the conversation to proceed successfully. The next account attempted solutions to both these problems.

Relevance Theory

The third theoretical approach that deals explicitly with pragmatic effects is *relevance theory* (Goatly 1997; Hanna 2011; Kovecses 2011; Schourup 2011; Sperber & Wilson 1986, 1995; White 2011; Wilson 2011; Wilson & Sperber 2012). According to the basic tenets of relevance theory, language

production and comprehension operate around a principle of optimal relevance, derivable loosely from Grice's relevance maxim. *Optimal relevance* means in the simplest sense that speakers normally will produce utterances that fit with or are relevant to the currently shared background knowledge of the interlocutors. This background knowledge is made up of specific bits of shared information called *contextual assumptions*. Comprehenders then will use those contextual assumptions, along with the utterances, to compute *positive cognitive effects* (PCgE in the following examples).[2] Positive cognitive effects involve such things as confirmations or disconfirmations of contextual assumptions, as well as computations of additional meaning.

For example, imagine that two interlocutors are both fans of a particular sports team and that the team is known mutually by both people to have lost an important game the previous evening. One of the people, Edwardo, saw the game as it happened. The other person, Ryan, although aware of the outcome, had missed seeing the game because of another commitment. If Ryan then asks Edwardo about the game, a few contextual assumptions are likely in place at that point (presented in brackets):

[A description is expected] + [a *negative* description is expected] (2.7)

Based on the shared common knowledge that inquiries demand responses, the first contextual assumption is that a response that describes the game is expected from Edwardo. Based on the knowledge that the team favored by the interlocutors lost, the second assumption is that the description of the game will be negative. If Edwardo then makes the comment

"Terrible!" (2.8)

Ryan can readily compute the positive cognitive effects that confirm the contextual assumptions at hand:

PCgE – confirmation of expectation of description

and

PCgE – confirmation of expectation of *negative* description. (2.9)

which constitute the comprehension of the utterance. Putting all the preceding together, we have

[A description is expected] + [a *negative* description is expected] + ["Terrible!"] = PCgE – confirmation of expectation of description and PCgE – confirmation of expectation of *negative* description. (2.10)

Where relevance theory and the principle of optimal relevance really pay off, though, is when utterances do not seem to apply directly to the current set of contextual assumptions. In such cases, comprehenders are warranted to compute positive cognitive effects that bring in additional meaning. Consider the same situation with the new response utterance, "A root canal," in the following[3]:

> [A description is expected] + [a *negative* description is expected] + ["A root canal"] = PCgE – getting a root canal is a *particularly* bad experience; PCgE – the experience of watching the game was similar to the experience of getting a root canal; PCgE – watching the game was a *particularly* bad experience; PCgE – confirmation of expectation of description; and PCgE – confirmation of expectation of *negative* description. (2.11)

In these situations, the kinds of positive cognitive effects that bring in additional meaning are very similar to conversational implicatures in Grice's view. But what relevance theory additionally supplies is contained in the more complex sense of *optimal* relevance that allows selection among possible positive cognitive effects, as well as a means of limiting them. Optimal relevance here essentially means that (1) there is additional meaning that the speaker wants the comprehender to infer, (2) computing this additional meaning is worth the comprehender's effort (i.e., it is not just superfluous), (3) this meaning fits with what the comprehender can and would prefer to infer, and (4) once there is enough additional meaning inferred to justify the effort to infer it, the comprehender can stop inferring additional information.

Relevance theory thus does a better job with the problems described earlier concerning Grice's view. Relevance theory, through optimal relevance, allows for selection of appropriate positive cognitive effects (one type of pragmatic effects in present terms). Relevance theory, or at least some interpretations of it, also diminishes the implicit claim that figurative or indirect language requires multiple stages of comprehension relative to direct language that requires only one. In relevance-theoretic terms, all utterances (or at least most), direct and indirect, require computation of positive cognitive effects. Some utterances might license the computation of a greater quantity or greater complexity of positive cognitive effects, but nearly all utterances will require at least some such computations.

Relevance theory, building on the accounts leading up to it, has emerged as the "juggernaut" of pragmatic explanations of meaning derivation (Gibbs 2005). The enormous attention it has received demonstrates the power of some of its ideas, as well as the passionate criticism the ideas have invoked,

leading to its ongoing revision. For instance, its application to the comprehension of metaphors and the tradeoff that arises between cognitive effort and the computation of positive cognitive effects, as well as how those might be predicted and measured, are current topics of much discussion (Carston & Wearing 2011; Gibbs & Tendahl 2006, 2011; Gil 2011; Kovecses 2011; Ryder & Leinonen 2011, 2014; Schourup 2011; Sequeiros 2011; Tendahl & Gibbs 2008; Walaszewska 2011; White 2011; Wilson 2011). As will also be shown later, how relevance theory might handle different *depths* of pragmatic effects – ranging from those inherent in the structure of a trope, through those that might be embodied, up to those that might involve social and cultural in addition to cognitive processes – is also unclear. However, as one of the latest and very widely studied, debated, and considered attempts to corral the notion of pragmatic effects and how they might be addressed with relatively parsimonious principles, relevance theory has made a major impact.

Philosophical Accounts

Other important linguistic/philosophic accounts also provide in-depth bases for discussing different pragmatic effect accomplishments (e.g., Recanati 2004, 2007). Consider as just one example Dascal's (2003) designation between "comprehended" and "grasped" meaning. According to this view, all kinds of speaker comprehension involve the use of pragmatics either to confirm that an explicitly stated meaning is intended by the speaker or to invoke an inferential abductive process to create interpretive hypotheses that reveal implicit meanings of the speaker. These hypotheses in the latter case could entail beliefs very similar to implicatures in the Gricean account. In either case, though, such comprehension can take place while still leaving out deeper meaningful aspects of the conversation intended by the speaker or inherent in the conversation based on the speaker's talk or behavior. To achieve these deeper meanings, the hearer must additionally "grasp" the speaker's meaning beyond mere "comprehension."

As an illustration, imagine that a medical patient and his physician are talking about the high cost of Alzheimer's medications, perhaps stemming casually from their noting that they had both viewed a recent television advertisement for a memory-enhancement drug. The conversation might be drastically different, though, if the doctor knew that her patient's mother was suffering from the disease relative to the doctor not knowing this. The potentially deeper meaning of the patient's seemingly idle input into the discussion of the drug, when his mother is in fact ill with Alzheimer's, and the doctor's grasping of this depth could involve more profound and important

kinds of hypotheses generated on the doctor's part. These could affect the train, comprehension, and appropriateness of the rest of the conversation.

As will be discussed at various points later, this comprehension/grasping distinction, along with other rich psychological phenomena that occur in human interactions, could underlie the performance of a number of pragmatic effects (e.g., ingratiation, mastery display, and admiration; see Chapter 3). These effects might not currently fall within the explanatory shadow of current accounts. That the doctor might derive these additional effects in the case where the patient's mother is known to be ill, for instance, is not *just* triggered by that propositional knowledge. It also arises from a deeply emotional and empathetic response, very much under the umbrella of broader psychological influences on language comprehension, that may not reside exclusively within that comprehension yet still affect it.

Inferences

In addition to the theoretical linguistic and philosophical work that has progressively refined concepts similar to pragmatic effects, another source of ideas about pragmatic effects is the more quantitative empirical and experimental work predominantly in psycholinguistics on inferences.[4] This is a rather large body of work extending over several decades that has attempted to empirically identify what kinds of meanings readers/hearers get more or less directly out of texts versus deriving or inferring *from* those texts during the process of online language processing. Major goals of this work have been to identify (1) what kinds of inferences are drawn, (2) when are they drawn (e.g., immediately on reading/hearing some text/talk construction or at some point later), (3) which inferences are necessary versus more optionally elaborative, and (4) what kinds of orienting tasks might affect whether different kinds of inferences are drawn and when?

A full review of this literature is far beyond the scope of this chapter, particularly the immense methodological issues and concerns in this work.[5] Indeed, these methodological concerns leave definitive answers to the preceding questions as yet unavailable and arguably impossible given current technologies despite recent developments in eye-tracking and virtual-world paradigms. Nevertheless, several of these kinds of inferences might be similar to the pragmatic effects discussed here for figurative or indirect language. Among these are the general categories of coherence and elaborative inferences – respectively, the concern inferences that are argued as necessary for a given construction to provide a coherent comprehension and inferences that are not as strictly necessary but which may nonetheless be

drawn under certain circumstances. The primary overlap with pragmatic effects and implicatures or contextual effects, however, is with the latter kind of inference.

First, though, briefly consider coherence inferences involving such things as pronominal references. These certainly appear in many kinds of figurative language both as simple syntactic support for neighboring figures as in the metaphor,

"You have to clean this room, it's an armpit." (2.12)

and as part of the figures themselves as in proverbs or verbal irony such as,

"The bread never falls but on its buttered side." (2.13)

"You can't judge a book by its cover." (2.14)

"The bigger they are, the harder they fall." (2.15)

"The more things change, the more they stay the same." (2.16)

"Ask my parents? Oh, sure, they're relationship experts." (2.17)

A great deal of debate has taken place between some linguistic and philosophical accounts concerning the role of contextual information in indexical and later processing. These debates apply here to coherence inferences in figurative language. For example, is it the case that the referential assignment of "it" to "room" must happen for the metaphor comprehension to succeed in (2.12)? Some accounts would argue for such a necessity, at least for novel metaphors. Others might hold that the contextual momentum of (2.12) being used in an actual setting of a filthy room may diminish referential assignment necessity for full metaphoric comprehension. Indeed, a hearer could potentially miss hearing the "it's an" part altogether and still telegraphically make the assignment and comprehend the metaphor.

Other accounts grapple with the level of fixedness apparent in comparable utterances and how that affects indexical processing. Consider the referential assignment of "its" in (2.13) versus (2.14). Example (2.14), in being a much more familiar and widely used proverb, might benefit from its concurrent greater fixedness. The referential assignment may be less of a necessity accordingly. Whether a pronominal referent is context independent or dependent is also important at both "said" and "conveyed" levels of meaning (Recanati 2004). Compare the referential assignments of (2.15) and (2.16) at each of these meaning levels. In (2.16), the referential assignment is neatly contained in the proverb – "they" refers to "things. In (2.15), however, the referential assignment is external in both uses of "they." Finally, consider the complexities of referential assignments across different figures in

a comparison of (2.16) and (2.17), with one being a relatively fixed proverb and the other a novel verbal irony.[6]

Despite the complexities they provoke, these kinds of collaborative inferences are not really on par with the types of rich meaning enhancements so far discussed as pragmatic effects of figurative language. If one espouses a very sequential model of parsing, which many scholars have generally argued against, the referential assignment is usually discussed as part of the initial syntactic/semantic computation that occurs before pragmatic meaning even begins. But even if one adopts a more interdependent lexical, syntactical, semantic, and pragmatic model, which seems to better fit most of the empirical evidence, coherence inferences are still a rather low-level computational activity. True, they can still affect meaning – and quite interestingly so for figures such as the proverbs in (2.13)–(2.16). But they are not particular to figurative forms. Nor do they contribute to a great deal of additional meaning when they do interact with other figurative forms (as in 2.12 and 2.17). As such, they do not warrant much further attention for our present purposes.

For elaborative inferences, however, the story is much more interesting. A number of inferences that are not strictly necessary for basic comprehension of some speech or text construction but that do get made under certain circumstances have been investigated. These elaborative inferences are also similar in many cases to the kinds of additional meaning brought about in pragmatic effects. Again, the entire extensive literature on each of these inferences will not be reviewed. Nor will we consider all the specific conditions that usually need to be present for those inferences to get made (for alternative sides of some earlier work on inferences, see McKoon & Ratcliff 1990, 1992; Perfetti 1989, 1993; Perfetti & Roth 1981; versus Bower & Morrow 1990; Graesser & Clark 1985; Long & Golding 1993; Long, Golding & Graesser 1992; Schank 1986; Trabasso & Sperry 1985; Trabasso & van den Broek 1985; Trabasso, van den Broek & Suh 1989; van den Broek 1988, 1990; Zwaan & Singer 2003). Instead, the parallels that exist between these kinds of elaborative inferences and specific kinds of pragmatic effects of figurative forms will be highlighted.

Causal Antecedent and Causal Consequent Inferences

An important set of elaborative inferences concerns the chain of causal links that might underlie the unfolding of some events. For instance, the causal link between some current meaning in a speech or text and a preceding speech/text or some external information (causal antecedent), as well as the forecasted state of affairs likely to be caused by a current speech/text

meaning (causal consequence), are two main kinds of inferences that have been investigated. For example, on reading the text

"The famous artist shot himself in the head," (2.18)

the inferences that the artist died from the shooting (causal consequence) or that he shot himself because he was depressed (causal antecedent) might be derived. Some research has shown that causal antecedent inferences are more likely drawn in normal reading compared with causal consequence inferences (Valencia-Laver & Light 2000). But either kind of inference might be drawn under appropriate conditions.

The point for our present concerns is that these kinds of inferences nicely correspond to some pragmatic effects of proverbs, idioms, hyperbole, understatement, verbal irony, and other figures. For instance, when hearing/reading the proverb

"When two dogs fight over a bone, a third walks away with it," (2.19)

a likely pragmatic effect is that the interpreter realizes that the causal link between the initially stated two dogs fighting and the later-stated third dog getting the bone is that the first two dogs and possibly other spectators are distracted by the fight. Thus an opportunity to obtain the bone is afforded. This distraction is not explicitly stated in the proverb. Yet it is likely inferred as the causal antecedent of the third dog stealing the bone. Indeed, such inferences are critical to the extollation function of many proverbs. These provide quintessentially an elaborate, detailed description of some mechanistic fact about the world via some much more concrete physical image that has a parallel structure. This broader extollation or advice-giving is made possible by the filling in of such causal antecedent (and other) inferences and then an application of this schema to the broader context and principles at hand.

Causal consequence inferences are also a major part of what proverbs do. Consider the proverb

"Look before you leap" (2.20)

spoken to a person considering a marriage proposal. Here a hearer would not only likely infer the causal consequence of looking before leaping (e.g., seeing how far the intervening precipice is as well as what might lie below), but additionally the causal consequence of *not* looking before leaping would be drawn (e.g., not reaching the opposite side, falling into the chasm, losing one's initial position but not achieving another, etc.). These causal

consequence inferences are also applicable to both the concrete domain (vision and physical jumping) and the figurative referent situation (the decision about the marriage).

Causal consequence inferences also play important roles in idioms, hyperbole, understatement, and verbal irony, among other figures (Colston 1997; Colston & Keller 1998; 2008; Gibbs 1986). For instance, when hearer's/reader's encounter idioms such as

"Goldman spilled the beans," (2.21)

they typically infer, as part of the idiomatic meaning, that the beans (news), when spilled (told), will move rapidly, chaotically, and far away from their container (speaker). They will be difficult, if not impossible, to recollect and return to the container. They also will create difficulties for the parties involved. These causal consequences apply poignantly to actual spilled dried beans as well as to important information divulged among people. They are part of what makes idioms the rich sources of meaning they are.

For understatement, causal consequence inferences are also key. They might be additionally catalyzed by the structure of the figure. Understatements typically present referent events in terms that are lesser in magnitude, quantity, and prevalence than is actually the case. In so doing, they can create contrast effects such that the perception of the referent events shifts accordingly (Colston 1997; Colston & O'Brien 2000a). For example, if an understatement stated as

"Seems to be a bit chilly" (2.22)

is made in reference to bitterly cold outdoor temperatures, the perception of the actual temperature may shift toward being colder. Such a perception shift is not strictly a form of causal consequence per se, but it could readily support or influence highly related causal consequence inferences (e.g., we are going to feel very cold).

Other kinds of verbal irony also can make these referential perception shifts happen and create or influence causal consequent inferences as well. Were a baseball player, for instance, to say to a teammate,

"Nice going man, way to hit that ball!" (2.23)

when the addressee teammate had actually struck out without hitting the ball, the perception of the quality of the teammate's play can shift toward the negative. This shift then could conjoin or support the causal consequence inference that the team will lose the game.[7]

Hyperbole also can give rise to causal consequence inferences, and indeed, conjuring such inferences seems to be a quintessential thing that hyperbole does (Colston 2007). Hyperbole typically involves there first being some discrepancy between actually occurring events and what is expected, preferred, or desired of those events. This discrepancy also typically but not always involves things turning out worse than expected or desired. A speaker or writer notices this discrepancy and wishes, among other things, to bring it to people's attention. Among the more straightforward means available to make people attend to something is to make that something bigger. Thus the speaker inflates the discrepancy between expected/desired events and reality in the form of hyperbole (Colston 2007) to bring attention to that discrepancy. For example, a woman enters her house, which she shares with another person, and the temperature is very warm. She looks at her housemate and says,

"It's two hundred degrees in here!" (2.24)

What might the roommate infer from this remark? First, as just argued, he would likely attend to the warmer-than-usual temperature given that hyperbole makes that discrepancy distinctive by enlarging it. But then, as part of filling in the relevance of his roommate having pointed out this discrepancy, he is likely to additionally note, among other things, the undesirable nature of the current situation. Causal consequences are part of why the current situation is undesirable (e.g., the next heating bill will be excessive). Thus they will likely be inferred accordingly.

Superordinate Goal, Thematic and Additudinal Inferences

Another set of elaborative inferences involves very broad information about the speakers or writers of utterances or texts. These inferences concern the superordinate goal(s) of the person speaking, writing, or acting; the overall theme of an utterance, text, or action; and the intent or attitude of the speaker of an utterance, author of a text, or actor of an action. These broad inferences were typically addressed in studies on people's processing of discourse-length texts. For instance, imagine reading a short text about a man who goes fishing for a short while but then quits early before catching anything. When do readers infer the motivation for the fisherman cutting his lines (superordinate goal – e.g., the man thought he wouldn't catch any fish)? What do readers infer is the overall moral of the story (theme – e.g., patience is a virtue)? What do readers infer the author's desires or feelings were in writing the text (author intent or attitude – e.g., to increase people's perseverance)?

These inferences, however, can be readily applied to a speaker making a short figurative utterance as well. Indeed, these sorts of broad inferences are possibly universal to many kinds of figurative language – given that figurative utterances are so frequently used for broader or at least ulterior goals compared with simply conveying some nonfigurative linguistic meaning. Although all kinds of language can achieve these broader goals, figurative language specializes in it. Indeed, achieving these goals may motivate the very existence of many kinds of figurative language.

For example, for the superordinate goal inference, consider indirect requests. As discussed in the reanalysis of the Roberts and Kreuz (1994) study earlier, the primary goal of a speaker using an indirect request is to get another person to take some action. Whether an addressee is metalinguistically aware that the speaker is trying to get him or her to do something might vary, but the mere acquiescence of the addressee in doing the action demonstrates that she at least implicitly inferred the speaker's superordinate goal of initiating some action on his part.

For thematic inferences, consider typically any proverb. The use of proverbs to highlight broad lessons about the world, to give advice, or to extol some virtue, behavior, or attitude (Honeck 1997) and addressees' recovery of these lessons occur because of thematic inferences. Thus, for instance, if a speaker uses the Shakespearian proverb

> "The nature of bad news infects the teller" (*Antony and Cleopatra*, Act 1, sc. 2) (2.25)

in response to a person's surprise that, although he was not at fault, he has been punished for the delivery of some bad news, a thematic inference is likely to take place. The addressee of the proverb likely would infer that the moral of the speaker's proverb is that bad news is usually associated with whomever delivers it. The addressee additionally may infer that she should try to avoid delivering bad news in the future. This additional inference, however, still would depend on the thematic inference. Thematic inferences thus seem to be necessary for proverbs to do what they do.

Finally, for inferring an author's intent or attitude, one can use any figurative form as an example. For a particularly strong case, though, consider verbal irony. Verbal irony has been both argued (Clark & Gerrig 2007; Sperber 1984, 1994, 1996; Winner & Gardner 1993) and empirically demonstrated (Gibbs & Colston 2002) to powerfully reveal a speaker' s attitude (typically negative) toward some referent topic. Thus, in the instance of a speaker using a sarcastic utterance such as (2.23), a typical and indeed

necessary inference is that the speaker's attitude about the teammate's level of play is negative.

Emotion Inferences

Another set of elaborative inferences very similar to the inferences on a speaker/writer's attitude involves inferring the emotional state of the speaker/writer. Many different pragmatic effects of different figures involve something like this kind of inference. As discussed at several points earlier, many figures enable expression of a person's negative attitude or emotion regarding some topic. Asyndeton and synecdoche express this negativity with mechanisms stemming from the minimal structures of the figures (Colston 2005, 2015; Colston & Brooks 2008). Verbal irony expresses negativity through, among other means, the contrast effect produced by a direct positive remark made about a typically negative topic. This effect renders the topic even more negatively (Colston 2002a; Colston & O'Brien 2000a, b). Other figures (e.g., profanity and dysphemism) can achieve a negativity expression through shock or suspension of politeness norms (Pfaff, Gibbs & Johnson 1997).

Still other figures seem to involve positive emotional inferences. For instance, many people feel emotionally positive when encountering a particularly apt, novel metaphor. Whether the nature of this positive affect derivation through comprehending a figure exactly matches that of an inference that a speaker is feeling positively, however, is not always clear. It could be that a comprehender infers that a speaker thinks highly of him by virtue of having used a sophisticated utterance the speaker trusted the comprehender would understand – as a form of wayward compliment. This then could lead the comprehender to reciprocate the affection, respect, or admiration. Or the comprehender simply could feel positively toward the speaker because she appreciates the quality of the meaning being expressed – without noticing the emotion or attitude of the speaker. A comprehender also could infer the positive emotion of the speaker by noting the positive connotation of the metaphor used (e.g., "He's my cavalry"). Indeed, the indirect nature of figurative language itself can produce positive affect in a number of ways akin to the indirect compliment noted for apt metaphors, but this would occur through a myriad of mechanisms found in varieties of figures (e.g., mastery display; see Chapter 3). Any of these causes of positive emotion in comprehenders could operate alone or through interaction and additionally could involve more straightforward inferences of the speaker's feelings (e.g., as in a comprehender inferring and appreciating the light-hearted emotion of a speaker who diffuses a tense situation with a witty figure).

Instantiation of Noun Category and Instrumental Inferences

These two types of inferences involve (1) inferring a subcategory or particular exemplar that instantiates an explicit noun or implicit case role required by a verb and (2) objects, body parts, or resources used when an agent executes an intentional action. For example, if a text explicitly states that a woman ate breakfast, the inference that bacon and eggs were part of the meal might get made by a reader or hearer. Or if a text says that a man cut some boards, then the inference that a saw was used is possibly made. For figurative language comprehension, noun category instantiation inferences are very much like the pragmatic enrichment effect produced by some metaphors. For example, a reader might encounter the metaphor, "The US economy is in the toilet," and infer associates of the metaphor vehicle such as excrement, unpleasant odors, uncleanliness, garbage, spiraling downward, and so on. These inferences could greatly enrich the comprehension of the negative viewpoint about the economy being expressed by the metaphor. Or consider a related metaphor, "The economy is being propped up by government backing of banks." Here a reader might infer that posts, jacks, or scaffolds of some sort are doing this "holding up." These latter specific inferences, and their characteristic of temporariness in particular, seem very much related to the enrichment that arises in comprehending this metaphor – that the governmental assistance is temporary, fragile, out of the ordinary, crucial, and so on, argued to be a hallmark of metaphor comprehension.

Subordinate Goal/Action Inferences

Subordinate goal/action inferences also appear to be involved in the meaning enrichment produced in metaphor comprehension. These inferences involve goals, plans, or actions specifying *how* an action is done. For example, continuing with the economic theme, imagine that a reader encounters the metaphor, "But most sectors of the economy are plodding along." Here the inference that the "plodding" is being done by slow, dragging, but deliberate steps and that although proceeding toward a goal, the actor is moving at a minimal speed are all possible. These propositions are constituted in the enriched metaphorical reading of that statement. Indeed, to refer ahead, a newer account of metaphor comprehension (see Bergen 2012; Gibbs 2003a; Gibbs, Costa Lima & Francozo 2004) claims that specific aspects of people's concrete bodily experiences with metaphor vehicles (e.g., people's physical experiences with "plodding" – dragging one's feet, feet falling heavily, exertion of much strength but with very slow progress, etc.) are implicitly neurally activated when comprehending the metaphor

and thus serve as a specific mechanism of metaphorical enrichment (see the section "Embodied Effects" later).

How Are Pragmatic Effects Unlike Implicatures, Positive Cognitive Effects, Interpretive Hypotheses, or Inferences?

The preceding brief review of some linguistic/philosophical theoretical and psycholinguistic empirical treatments of pragmatic effects has brought us to the notion that pragmatic effects are at least highly related to and possibly even a superordinate categorization of implicatures, positive cognitive effects, interpretive hypotheses, inferences, or similar constructs. There may be pragmatic effects, however, that are somehow distinct from this collection of mechanisms. Consider the following ways that the nature of pragmatic effects might differ from implicatures, with examples for illustration. This issue will be treated in greater detail in the later discussion of the range of pragmatic effects in Chapter 3.

Implicatures, positive cognitive effects, interpretive hypotheses, and inferences are cognitive work that takes place to fill in or fill out meaning to justify the relevance of someone having said something optimally. At this level of description, pragmatic effects are essentially the same thing as these other processes. Pragmatic effects might be somewhat different, however, in that the other processes are primarily linguistic, psycholinguistic, or cognitive/schematic in that they typically hinge off the syntax, semantics, schematics, and pragmatics of utterances and contexts. Some pragmatic effects, though, although possibly stemming in part from these sources, also may frequently emerge fully, separately, or in some combination with implicatures from *structural*, *embodied*, *psychological*, and *sociocultural* components of the figures and interlocutors (Colston 2009). These components, although not necessarily deterministic, nevertheless may trigger some aspects of meaning that occur in parallel with language comprehension per se. *Structural* affects may arise directly from the standard generic forms of the figures (e.g., juxtaposition of opposites) interacting with relevant psychological processes (e.g., contrast effects in perception). Some lower-level *embodied* pragmatic effects may arise from physical aspects of pronunciation and other factors. These embodied mechanisms are also available to nonfigurative language but, when coupled with figurative mechanisms of pragmatic effects, can work particularly well. Still other pragmatic effects might be *psychological* in nature, in that psychological mechanisms other than those explicitly involved in embodiment and social interaction might

underlie the effects. Lastly, some pragmatic effects might arise from broader *sociocultural* mechanisms that, as with the embodied and psychological sources, are not unique to figurative language but can operate particularly well in figurative forms (Colston 2009a; Colston & Katz 2005).

Structural Effects

Consider first the structural nature of some pragmatic effects. Metaphor and simile, for example, implicitly juxtapose seemingly unlike things that actually have some sharable or comparable components. Although *how* this derivation of target and vehicle sharedness occurs varies considerably depending on which theory(s) of metaphor comprehension one espouses, they all nonetheless share one claim. The *juxtaposition* of target and vehicle domains serves usually to highlight, bring attention to, make salient, or enrich the shared co-referential or emergent components in the domains. This is especially so for the more abstract of the juxtaposed things. Again, metaphor accounts differ on this score, but they are similar in arguing that *how* this highlighting or enrichment comes about stems at its core from the inherent juxtapositional (whether explicit or implicit) structure of metaphors.

Interestingly, the focus of different metaphor theories on the specific means of evaluating the target and vehicle relationship sometimes gloss over an important characteristic of metaphorical linguistic juxtaposition of targets and vehicles – juxtaposition, *in and of itself*, has deep psychological meaning. As part of our natural cognitive capacity to categorize, we group or cluster similar things near to one another (physically and conceptually) while separating dissimilar things. Given that a metaphor, through linguistic means, creates such a juxtaposition, it thus inherently *presupposes* similarity of some sort between or among the grouped items. Thus, with details about the particular metaphor theory still aside for a moment (e.g., item A must have characteristics of item B, or vice versa; items A and B belong to a superordinate category; item B is being compared to item A; shared and emergent characteristics of items A and B increase in salience; item B is analogous to item A, etc.), juxtaposition itself already psychologically connotes similarity. Metaphors thus do not just symbolically connect targets and vehicles like an equivalence sign in mathematics. They also rather actively *demonstrate* similarity via a deep-seated psychological image schematic source of meaning – SIMILARITY *is* NEARNESS (as in juxtaposition).

Verbal irony, however, is in a way the antithesis of metaphor in how it uses juxtaposition. Verbal irony *pretends* to juxtapose things linguistically to really

show that they are *not* similar. Indeed, this differential use of the power of juxtaposition is one likely reason why metaphor and verbal irony are the two most frequently discussed, and arguably widely used, tropes. Consider verbal irony in its sarcastic form. Sarcasm typically juxtaposes negative or undesirable actual outcomes with contradictory, usually positive or desirable expectations or preferences that are stated (e.g., saying "Nice" about something bad). This juxtaposition serves, among other things, to make the outcome look worse in comparison with the stated preference (and, indeed, relatively worse in comparison with the outcome had it been directly described negatively or not described at all) (see Colston 2002a; Colston & O'Brien 2000a, b). This shift in the perception of the actual event occurs because of a contrast effect between the stated and actual events. Such contrast effects are deeply embedded in our perceptual and even sensory systems.

As another example of structural effects, tautologies (e.g., a promise is a promise) implicitly and directly juxtapose something with itself (Gibbs & McCarrell 1990; Meibauer 2008). With respect to the juxtaposition image schema, this is an odd thing to do because it leaves wanting the partner in the juxtaposition. This may serve to create a vacuum of sorts in the meaning of a tautology. It might then result in a flurry of implicature, positive cognitive effect computation, or inference activity to resolve the seemingly circular nature of the comment. This itself can affect meaning (Ward & Hirschberg 1991). The flurry of work could trigger a cognitive dissonance mechanism that would bolster the perceived importance, insight, or depth of the tautology's meaning. It also could, however, trigger a recognition of and then resistance to this exceptional inferencing process, as seen when, on occasion, a comprehender balks at deriving a tautology's meaning. In essence, tautologies, by their inherent structure, thus can be powerful meaning lures that draw comprehenders into the pragmatic effect process (and enrich meaning accordingly). Or they may make comprehenders suspicious and resistant to it. Either of these possibilities can influence the interpreted meaning of the tautology.

Lastly, consider the synecdoche form of metonymies. Synecdoche implicitly aligns the entirety of some referent with some lesser or related attribute(s) of that referent. For example,

> "Pink jacket over there wants to see something in the display cabinet." (2.26)

Structurally, this implies an equivalency of the entirety of the referent with that lesser or differing thing. The result is often a diminishment of the referent, perhaps particularly so when the referent is a person (Colston 2015;

Colston & Brooks 2008). Part of the derision of personal synecdoche can arise via an emotional inference that the speaker has a negative attitude about the referenced target and/or its attribute. This might be especially apparent when the attribute is unusual, for example, had the referent's jacket in (2.26) been unusually large, bright, and with flashing sequins. But much of the derision also stems from the purported equivalence of a referent person and his or her referenced attribute inherent in the synecdoche structure. This is shown through derision being achieved when a referenced attribute is *not* unusual, for example, if we replace "Pink jacket" with "Brown eyes" in (2.26). Indeed, these latter types have been shown to be particularly derisive (Colston 2015; Colston & Brooks 2008).

Some pragmatic effects thus seem similar to generalized implicatures. But they stem more from the standard structures of some figures rather than the syntactical, semantic, schematic, and pragmatic information a given utterance of the figure invokes. For instance, figures that juxtapose two things (metaphor) invoke the deep psychological meaning that the juxtaposed things are similar. Figures that *pretend* to invoke that psychological similarity (irony) actually can enhance the *dissimilarity* between the things. Figures that juxtapose a thing with itself rather than a comparator (tautologies) can entice enhanced (or discourage any) meaning computation. Finally, figures that juxtapose a thing with only a portion of itself (synecdoche) express a diminishment of the referent thing. These pragmatic effects can interact with more particularized inferences as well as other standard generalized implicatures to produce the meanings enabled in the conversations at hand. Moreover, as mentioned earlier, they are not deterministic, but their typical systematic pattern of functioning often makes them accomplish the subtle (and not so subtle) pragmatic effects that the figures and their structures would predict.

Embodied Effects

Next, consider pragmatic effects that might have an embodied nature. Two types will be considered here, those having to do with physical aspects of pronunciation and those involving embodied simulations. The former arguably can apply to any kind of figurative and, indeed, all language. The latter also can apply generally but perhaps most specifically to metaphor.

Following in the tradition of classical and more recent psychological and linguistic studies on sound symbolism (Bloomfield 1933; Bolinger 1950; Brown 1958; Brown, Black & Horowitz 1955; Markel & Hamp 1960; Parault & Schwanenflugel 2006), a recent series of studies conducted by the author has

begun to look at whether very simple physical characteristics of pronunciation might have an effect on linguistic meaning. Among the many characteristics so far investigated are the speed with which some collection of phonemes can be pronounced, the pitch of some phoneme sets, and the types of phonemes used in alternation (e.g., stops and vowels versus fricatives and vowels).

For one study, people were asked to interpret the meanings of pseudowords that varied across one embodiment factor, physical pronounceability (Colston & Kinney 2015; Colston & Kodet 2008). In one task, people simply pronounced the pseudowords and rated the degree of *speech-muscle constriction* this pronunciation required. In a separate experiment, the pseudowords were used to describe situations that were selected for being ambiguous with respect to emotional tension – the situations are potentially either tense or relaxed (e.g., "The mood in a classroom on the first day of class"). A third study then put participants into either physically tense or physically relaxed bodily states and then had the participants make the same interpretations of the situations, this time without the pseudowords.

The first task revealed that pseudowords designed to require more speech-muscle constriction (e.g., "srensh") were rated as such relative to pseudowords designed to require less speech-muscle constriction (e.g., "sreele"). The pseudowords were otherwise kept as similar as possible and did not readily resemble other English words. The second task revealed that neutral situations described with the high-constriction pseudowords were rated as more tense than the same situations described with the low-constriction pseudowords. The third task revealed that when people are in demonstrably tense physical bodily states (they were instructed to stand, bend all their joints, clench and hold all their muscles, and then do the rating task), they rate the situations from the second study as more tense than other people interpreting the same states when in demonstrably relaxed physical bodily states (instructed to sit, relax fully, and then do the ratings).

A follow-up study addressed the possibility that these results were due to semantic priming. A first task gave all the pseudowords in random order to a new group of people who were asked to provide synonyms for the pseudoword meanings (they were told that the pseudowords were actually real words from a nearly extinct language that had meanings related to the "physical characteristics of things"). These synonyms then were given alone to two other different groups of people. The first group was asked to rate how similar the meanings of the synonyms were to the meaning of the word "tight." The second group rated how similar the meanings of the synonyms were to

that of the word "loose." Comparisons between the average ratings given to the synonyms made from high-constriction pseudowords versus those made from the low-constriction synonyms were not different from each other in the group making the similar-to-"tight" ratings. The ratings also were not different in the other group doing the similar-to-"lose" ratings. People in the original tasks thus were not systematically reminded of actual English words such as "tight" or "loose" or words that had similar meanings when working with the pseudowords. The findings thus isolate the explanation that people can use very low-level embodied information (i.e., how much muscle tension is required to pronounce some words) to assess the broader semantic meaning of those words.

Although, clearly, this phonetic meaning influence could apply to all forms of language, it might have a particularly strong influence in figurative language. In figurative language comprehension, despite the argued lack of processes different from nonfigurative language comprehension (Gibbs & Colston 2012), there remains a possibly greater richness or density of meaning being conveyed. Indeed, the kinds of pragmatic effects discussed throughout this chapter for figurative language demonstrate some of that richness. It could be, then, that other meaning influences, such as the phonetic ones investigated by Colston and Kodet (2008), thus have a greater role to play in figurative language. This claim is admittedly speculative at this point but not without merit – to the extent that a given utterance of figurative language enhances a search for meaning, any meaning influence likely would increase in importance.

For instance, if a comprehender were to encounter some new term being applied to the personality of a stranger, how would the comprehender arrive at the intended meaning? One possibility is that the comprehender simply would rely on what seems to be a pattern in other informal or slang terms for personalities. Pretend for a moment, for the sake of argument, that such a pattern exists in that certain derogatory slang terms have a high pitch relative to complementary terms that are lower in pitch:

First Set	Second Set[a]	
dweeb	spot	
geek	fox	
sissy	bomb	(2.27)
wimp	top	
priss	hawt	

[a] From www.urbandictionary.com.

Hearers of these terms then should be able to readily derive at least the polarity of meaning in the novel term they have encountered. However, at least according to the semantic priming control used in the Colston and Kodet (2008) study, this pattern matching does not appear to be the major (or at least only) source for determining the meaning of new terms. What could instead be a primary source of meaning is the more embodied and metaphorical derivation, aligning with the physics of sound production, that high-pitched things tend to be small (unimportant, negative), whereas low-pitched things are relatively big (important, positive). With little else on which to derive meaning, subtle influences such as embodied and metaphorical sources may carry a lot of weight.

The second embodied nature of pragmatic effects can be seen in people's comprehension of metaphors (Gibbs 2003a; Gibbs, Costa Lima & Francozo 2004). According to this view, metaphor comprehension does not *simply* involve the activation of conceptual domains that might have similar structures. Nor would it involve only the computation of blended meaning spaces that incorporate characteristics from both target and source domains as well as emergent ones. Indeed, metaphor comprehension does not *simply* involve any of the primary mechanisms of metaphor comprehension put forth in the major theories on metaphor comprehension. Rather, metaphor comprehension involves the additional running of mental/neural simulations of actual bodily interactions with source domain content that then enables rich embodied meaning to contribute to the metaphor comprehension. This rich meaning would then additionally affect the pragmatic effects of the metaphor.

For example, imagine that a person hears (reads) the following metaphor, said by a speaker who had just introduced a novel, intriguing idea into a conversation among several people:

"Just let that idea marinade a little while." (2.28)

According to the embodied simulation view, a hearer of this metaphor would run a simulation of his actual physical experiences with marinating. He might very rapidly, but not necessarily consciously, re-experience actual times he had taken some meat or other foodstuff, placed it in a container, added some intricate flavorful sauce or spices, smelled or tasted the mixture, allowed it to soak for some period of time, then finished preparing and cooking the dish, and finally, thoroughly enjoyed the aroma, texture, taste, temperature, and moistness of the meal as a result of this time and effort spent marinating the food. He might even implicitly compare this general experience with other times when food was not marinated and was correspondingly less enjoyable.

All this rich multisensory and motor experience is then available to apply to comprehending the metaphor. That time is needed for the marinade to work is richly embedded in the embodied experience (the person recalls the impatience he had felt in wanting to finish the meal but knew that the marinade required the allotted time). That the effort of marinating is worth the person's while is also available (the person's mouth actually waters in thinking about the taste of the final meal). That the value of the marinade did not seem apparent at the beginning of the process also can help the person comprehend the metaphor (the person did not see at the time it was done how the slimy and salty mixture poured over the food initially would lead to a more tender texture later).

This embodied view of metaphor comprehension thus supplies a great deal of information outside the arguably somewhat blander conceptual structures discussed in metaphor comprehension theories that do not attend to embodied meaning (e.g., marinades take time to make a food taste good – new ideas take time to fully appreciate). This additional meaning then would largely contribute to the enriching pragmatic effect of metaphors identified in the earlier reanalysis of the Roberts and Kreuz (1994) data on why people speak using metaphors.

Psychological Effects

A number of different psychological mechanisms, some of which are not strictly linguistic, also may be at the root of some pragmatic effects. To illustrate one such mechanism, consider the effect of cognitive dissonance on figurative language use (Colston 2010).[8] Cognitive dissonance (Festinger 1954) is a fairly well-established mechanism from early social psychology that is widely familiar to anyone who has studied introductory psychology and, indeed, may be known by a more lay audience. Its potential applicability to figurative language use and comprehension, however, may not be as widely recognized or appreciated.

Cognitive dissonance affects the meaning people place on anything they have had to do. This includes any language processing/interpretation (or production) they have had to conduct. It does so by claiming first that people seek to align their actions and beliefs. If these do not cohere, then a form of cognitive/emotional tension – cognitive dissonance – increases. For instance, if a person strongly advocates regular exercise but then does not exercise herself for a long time, she would be in a state of high dissonance. The account next proposes that people seek to minimize dissonance because having high dissonance is uncomfortable. Thus people will seek

to lower it by adjusting either their behavior or their beliefs. Finally, the account purports that in many, perhaps most, instances, changing beliefs is easier than changing behavior. Thus people behave accordingly, often without awareness.

Cognitive dissonance can arise, for instance, when a person engages in cognitive work during figurative language interpretation (production). People commonly believe that it is wasteful to engage in work that is not necessary. Thus a person's successful interpretation of figurative/indirect language, which involves cognitive work, would, in turn, require justification. People thus might come to view the meaning derived from a figurative utterance to be somehow different (e.g., more accurate, more encompassing, or more truthful) in order to justify the work they expended to derive the meaning. This alteration or addition to meaning is not coming internally from language processing per se. Rather, it is a source of meaning *emergent* from the fact that language processing of a certain form took place. Moreover, this change or enhancement of meaning is automatic, fast, and difficult to disentangle from internal linguistic sources.

It is useful to note that this cognitive dissonance mechanism is indeed a very powerful tool of communication, affecting language comprehension/production far beyond the domain of figurative/indirect language. It is frequently used by people, perhaps unknowingly, for persuasive purposes. It explains in part the tendency for people to believe anything they see in printed form, for people to believe things they have been told, and for people to increasingly believe language that they themselves have produced, if only to justify the work involved in this comprehension/production.

Sociocultural Effects

Finally, consider pragmatic effects that might reside in social, cultural, or related domains. A number of these kinds of influences have been investigated for many levels of figurative language cognition, including their pragmatic effects (see Colston & Katz [2005] for a synopsis). Essentially, these kinds of social influences involve (1) social knowledge about speakers and hearers, (2) degree of shared knowledge among interlocutors, (3) degree of familiarity in interlocutors, (4) enablement of social information as a function of social structure, language, and culture, (5) extent of egocentrism in speakers, and (6) intricate interactions of social information with language processing. Each of these is considered briefly.

Social Knowledge about Speakers/Hearers

Among the kinds of influences investigated concerning social knowledge are individual characteristics of speakers of figurative language, such as their gender (Colston 2005; Colston & Lee 2004; Link & Kreuz 2005), their frequency of being ironic or the stereotypical nature of their occupation with respect to being ironic (Pexman 2005; Pexman & Olineck 2002; Pexman, Ferretti & Katz 2007), the degree to which they are susceptible to acting as a conspirator with an ironic perspective (Gibbs & Izett 2005), their stereotypical level of crudeness (Kwapil, Brey & Colston 2006), their level of introversion or extroversion (Colston 2015), and their preferences regarding formality (Colston 2015). Other sociocultural variables concern characteristics of the hearers (readers) of figurative language, including some of the same variables in speakers' as well as in hearers' (readers') overall proneness to ironic interpretations (Pexman 2005) and their familiarity, comfort, and experience with interacting with verbal irony (Gibbs 2000, 2012).

Each of these influences has been shown to affect the product of figurative language comprehension. Most interesting for our purposes is that these influences can occur at the earliest stages of processing (Colston 2005). They need not get used only downstream during presumed later pragmatic inferencing. This suggests that social information may constitute another meaning influence that can in part be external to linguistic processing per se, involving expectations or other forms of framing of linguistic processes that are present before linguistic processing takes place.

Shared Knowledge among Interlocutors

Additional social or cultural influences can be mediated by the knowledge base shared between interlocutors (see Chapter 4 for a broader discussion). For instance, the degree to which interlocutors share different cultural knowledge can greatly affect figurative language comprehension and the concomitant type and scope of pragmatic effect derivation (Clark 1996; Schober & Clark 1989). Social characteristics of individual participants in conversations also can interact with the knowledge base of the interlocutors to affect pragmatic effects. For instance, the knowledge shared between interlocutors, in being a form of human memory, is highly malleable. This can allow social relationships between interlocutors and characteristics of individual interlocutors to affect what is believed to be collectively known by the interlocutors. This collective knowledge, in serving as a backdrop for figurative language, can, in turn, affect comprehension of that figurative language (Colston 2005, 2008).

Familiarity in Interlocutors

Aside from the knowledge shared by interlocutors, the mere degree to which they know each other, the duration of time they have known each other, their social relationship, and the degree to which that relationship implies familiarity all can contribute to the comprehension and pragmatic effect derivation of figurative and other language (Clark 1996; Schober & Clark 1989). As just one brief example, synecdoche personal references, which by their structure generally can express derision, are mediated to the extent that the speaker and referee are familiar with each other (Colston 2015; Colston & Brooks 2008). Other work also has demonstrated the more playful side of otherwise derogatory figurative language, often as a function of interlocutor familiarity (Gibbs 2000; Slugoski & Turnbull 1988). What these findings show is that pragmatic effects that can toggle between being positive and negative can be affected by the degree of interlocutor familiarity. This also would involve knowledge held by the interlocutors before any utterances are even made.

Enablement of Social Information: Social Structure, Language, and Culture

Social sources of pragmatic effects are also mediated by the social structures that exist among interlocutors. For example, people might be more apt to use certain kinds of figurative language in certain social groups or classes more than others. As another brief example, one line of work has revealed that people will systematically vary their degree of figurativeness in gratitude expressions – comments spoken after receiving thanks for a granted favor – as a function of how much the speakers (1) respect, (2) admire, and (3) are fond of the addressees, as well as (4) how costly the favors were and (5) the gender of the interlocutors (Colston 2002b; Colston & Lee 2004; Katz, Lenhardt & Mitchell 2007).

The actual language being spoken also can enable or prevent some kinds of figurative language and the pragmatic effects they trigger via social mechanisms. Again, for just a few examples, consider the complex and strong system of honorifics in Japanese. This system allows a much subtler kind of verbal irony via use of these honorifics compared with languages that have relatively weak honorific systems (Okamoto 2002). Chinese also affords a subtle means of irony through the passive *bei* construction (Yao, Song & Singh 2013). Differences in how some languages conceptualize certain abstract concepts (e.g., time) and the concurrent metaphors that get used accordingly thus can vary in the strength of their meaning enhancement (Boroditsky, Fuhrman & McCormick 2010).

Finally, cultural differences can affect social sources of pragmatic effects. The degree to which people may withhold information from one another as a cultural norm can affect whether certain kinds of figurative language accomplish different pragmatic effects. For instance, Keenan and Li (1976) argued that Malagasy culture, in commonly practicing and valuing the withholding of information, undermines how quantity maxim violations (as might support understatement, asyndeton, and other figures) could trigger certain pragmatic effects. Llongot culture, in valuing collective activity and responsibility, greatly reduces the potential for face threat in directives and thus undermines the compensating function of indirect speech acts (Rosaldo 1982). Thomas Holtgraves (1997) also has demonstrated in a series of studies that the positioning of a culture along a continuum of collectiveness to individualism can greatly affect the type, extent, and degree of pragmatic effects resulting from figurative language use. Most generally, a pattern emerges in that the more collectivist cultures produce and derive more extensive pragmatic effects from figurativeness than relatively individualistic cultures (see Holtgraves [1997] for a discussion of this work).

Egocentrism in Speakers

The degree to which speakers take account of the common ground shared with their addressees/hearers is an important way in which social interaction affects pragmatic effect derivation. Indeed, this issue is taken up extensively in Chapter 4, but for illustrative purposes here, speakers will on occasion take careful stock of what they and their interlocutors mutually know in their use of figurative language and in the concomitant pragmatic effects that are sought. At other times, though, speakers are far more focused on their own egocentric conversational needs (Barr & Keysar 2005; Colston 2009; Horton & Gerrig 2005). The ways in which comprehension and pragmatic effect achievement occur in these different scenarios show both how some current theoretical accounts of figurative production and audience design might require revision and how other social interaction phenomena play a role in comprehension.

Social Information Interacting with Language Processing

Lastly, there may be important ways in which social interaction mechanisms, language comprehension, and other psychological principles work together in complex patterns to explain some communicative phenomena. One example illustrates how figurative language comprehension, including pragmatic effect derivation, stress, and familiarity, can work interactively to produce and possibly perpetuate miscomprehensions in discourses

(Colston 2005). To the extent that figurative language comprehension and pragmatic effect derivation are cognitive tasks, they are vulnerable to breakdowns when a given comprehender is stressed under undue cognitive load. A great deal of other research also has shown that, all else held equal, people are more stressed when in unfamiliar versus familiar social situations. These social situations can concern age, ethnicity, gender, occupation, and other variables. Coupling these findings, we have the following mechanism: when people are in unfamiliar social situations, their ability to derive subtle pragmatic effects from a use of a figurative utterance can suffer. This can result in miscomprehensions or incomplete comprehensions that can perpetuate the social divisions that caused the social tension in the first place (Colston 2005).

3

What Are the Pragmatic Effects? Issues in Categorizing Pragmatic Effects

Several difficulties arise immediately when we try to organize any taxonomy of pragmatic effects. Although it might be possible, and indeed seemingly easy, to discuss the different sets of pragmatic effects that different figures produce (empirically validated as well as reasonable but speculative), we must first, however, discern different figures themselves. Unfortunately, distinct problems are involved in attempting to catalog figures this way (Gibbs & Colston 2006, 2012). Additionally, even if figures can be delineated, discerning between different pragmatic effects produced by those figures is also problematic. It is not always clear, for example, which pragmatic effects should be considered basic versus superordinate categories. Indeed, on occasion, pragmatic effects are reversible in their hierarchical structure. Pragmatic effect A sometimes serves as a subtype of pragmatic effect B, and sometimes the reverse. Finally, difficulties in decontextualizing some figures and their effects make strict figure-effect associations less than universal.

ANOMALOUS FIGURES

Consider as just one example of the first problem with categorizing figures the following three categories of anomalous figures:

- *Embedded figures.* Some seemingly stand-alone figures are actually made up of other kinds of subfigures (e.g., many idioms, proverbs, and other relatively fixed expressions use metaphor, metonymy, hyperbole, etc. and often more than one of these subfigures in their construction).
- *Blurred figures.* Mixtures of figures where it is not always clear where one figure ends and another begins (e.g., many metaphors are inherently hyperbolic).

- *Renegade figures.* Seemingly straightforward instances of one kind of figure (e.g., hyperbole) but that occur in relatively limited contexts of use can emerge as a wholly new kind of figure (e.g., gratitude acknowledgments, as in "No problem, anytime you need a favor").

When one wishes to then discuss pragmatic effects that might stem from these figures, concomitant problems arise. First, consider the embedded figures. Are the pragmatic effects achieved by the broad idiomatic or proverbial forms arising from the features generally characteristic of those broad forms? Or are the effects instead (or additionally/interactively) coming from the other figurative types (the metaphor, hyperbole, etc.) embedded in the broader forms? For example, if a person hears a speaker use the proverb

"It's always darkest before the dawn," (3.1)

do the pragmatic effects that arise in the hearer come from the distinguishing characteristics of idiomatic/proverbial forms (e.g., their long-seated history in various cultures, their general fixedness, their somewhat complex structure [not being simple nominal metaphors, etc.], and, mainly for the case of proverbs, their frequent use as extollations, proclamations, nuggets of wisdom, etc.)? Or do the effects come from the embedded subfigures such as, in this particular example, metaphors (equating "dark" with bad, "dawn" with good, etc.) and possibly hyperbole (the extreme-case formulations "always" and "darkest")?

For blurred figures, when distinctions between figure types are amorphous or when multiple figures are blended in a given utterance, are the pragmatic effects of the purer separable types both performed? If the two separable types both perform the same pragmatic effect, is that effect more powerful (or more diluted)? Or does the utterance act as a kind of double entendre with potential emergent meanings stemming from the coincidence of multiple meanings?

To illustrate, consider the following segment of dialog from the 1990s syndicated American television program *Seinfeld*. The characters, Jerry and his Uncle Leo, are sitting in a booth at Monk's coffee shop, where Jerry had invited his uncle to discuss something. Uncle Leo receives a hamburger he ordered:

UNCLE LEO: "Look at this, I told them medium rare; it's medium."
JERRY: "Hey, it happens."
UNCLE LEO: "I bet that cook is an anti-Semite."
JERRY: "He has no idea who you are."

UNCLE LEO: "They don't just overcook a hamburger, Jerry."
JERRY: "All right. Anyway, the point I was making before Goebbles made your hamburger is a man like you could be dating women twenty years younger."

The comment by Jerry, "before Goebbels made your hamburger," is an interesting complex blend of metaphor, hyperbole, and verbal irony. It metaphorically discusses the cook in terms of the infamous Nazi propaganda minister Joseph Goebbels. This comparison is also inherently hyperbolic because the cook's action, albeit a likely accidental disservice to Uncle Leo, almost certainly does not have the gravity of anti-Semitism. The comment is also verbal irony because Jerry does not earnestly wish to say that the cook is evil. Rather, he intends the contradictory notion that the cook is in fact innocent in relation to the horrific acts committed by the real Goebbels.

As for the questions concerning pragmatic functions of blurred figures, a few studies have addressed mixtures of figurative language types. But many questions remain unanswered. One series of studies that investigated statements readable as either metaphor or irony demonstrated that social information can influence which kind of interpretation is taken. These studies also revealed that the social influence takes place very early in the processing of the forms (Katz 2005; Katz & Pexman 1997; Pexman 2005; Pexman & Olineck 2002). This line of work did not, however, directly treat the figures as combinations *of* metaphor and irony.

Another study that did look at comprehension of combinations of metaphor and irony, as well as some of their pragmatic effects, revealed that these combinations took longer to comprehend than instances of irony alone (Colston & Gibbs 2002). To explain this finding, which differed from other comprehension duration studies on figurative blends (Gibbs 1986b), Colston and Gibbs (2002) argued that differences may exist in the kinds of blends of figurative language such that some blends (e.g., metaphor and irony) might be more difficult to comprehend versus other more compatible ones (e.g., irony and indirect requests) (Gibbs 1986b). For the pragmatic effects, the Colston and Gibbs (2002) study revealed a number of differences in the inferences people drew from the simple ironies versus the irony-metaphor blends. People thought the simple ironies exceeded the irony-metaphor blends on (1) effective expression of the speaker's beliefs, (2) demonstration of the speaker's pretense, (3) allusions to prior beliefs, (4) complex demonstration of the speaker's multiple beliefs, and (5) degree to which the comments mocked prior beliefs. It thus seems, at least for blurred

figures that are arguably relatively difficult to combine, that the pragmatic effects of one figure (metaphor) compromise those of the other (irony).

Another study by Colston and Keller (1998) looked at the combination of hyperbole and irony. This study revealed that one pragmatic effect, surprise expression, seems additive when the figures are combined. Participants in this experiment read instances of combined hyperbole and irony, hyperbole alone, irony alone, and nonfigurative commentary. Ratings were collected on how surprised the speakers were in making those comments. The combined comments expressed the most surprise. These were followed by the individual figures, which did not differ from each other. All these were followed by the nonfigurative comments. Thus this study shows a lack of interference of the pragmatic effects of the different figures rather than the compromise found in the Colston and Gibbs (2002) study on metaphor and irony. Another study that also looked at irony and hyperbole (Kreuz & Roberts 1995) concurred with the general finding of the Colston and Keller (1998) work in demonstrating that hyperbole aided the overall interpretation of irony.

The take-home message from this limited work on blurred figures demonstrates that some blends of figures seem to interfere with the pragmatic functions of the individual figures in the blend. For metaphor and irony combinations, the metaphor seems to reduce the strength of the ironic pragmatic functions. For other blends, such as irony and hyperbole, there seems to be no weakening of the individual pragmatic effects but neither an enhancement. Rather, the individual effects in this case seemed merely additive.

One might speculate about why this difference in the pattern of pragmatic effect interactions is found. It could be simply that the general mechanism of the metaphorical figure (disparate domain juxtaposition, as in "Grampa is a turtle") does not as readily blend with mechanisms of the forms under the irony umbrella. Irony tropes typically make use of references varying along a continuum of a singular domain (e.g., very little of something to a lot of it, as in "I see you added a pinch of salt" when a cook pours a cup of salt into a dish preparation). Clearly, though, more work is needed to specify explanations for these differences and to address other questions about blurred figures and their pragmatic effects.

Lastly, for renegade figures, if a figure, by virtue of belonging to a particular category of figure types, makes use of the standard mechanisms from that category, then how can it achieve new pragmatic effects that are different from other figures in the category? Consider disbelief expressions as an example. In this form of language, a speaker utters a

statement that, on the surface, seems to bear the same characteristics as verbal irony. Take the following example used in Colston (2015) and Colston and Peitz (2000). A speaker accidentally locks her keys in the trunk of her car and then says,

"I did *not* just lock my keys in the trunk!" (3.2)

This example resembles a standard verbal irony in that the speaker is stating something counterfactual (not having locked the keys in the trunk) to the actual referent situation (having locked the keys in the trunk). The speaker is also referring to the more expected, desired, or preferred state of affairs (not having locked the keys in the trunk). This can create a contrast with the actual situation, making that situation look worse in comparison (Colston 2002a). The speaker also may be seen as pretending to assert the counterfactual situation but wishing to also make this pretence visible (Clark, 1996; Schober & Clark 1989) or as using some other stereotypical mechanisms of verbal irony. One might thus dismiss this form as just an instance of verbal irony.

In the case of disbelief expressions, however, an additional dimension seems to set these expressions apart from verbal irony. Disbelief expressions generally fall into distinguishable categories along a relevant continuum. Most exemplars in American English involve the speaker saying one of three possible things; (1) an outright denial that the negative event occurred (*not* expressions – "I did not just lock my keys in the trunk"), (2) a command or request to not be told that the negative event occurred (*tell* expressions – "Don't tell me I just locked my keys in the trunk"), and (3) statements that the speaker cannot cognitively assimilate the negative event (*believe* expressions – "I can't believe I just locked my keys in the trunk").

Moreover, this range in categorical forms seems to lie along a continuum that itself might affect pragmatic effects. In a study that investigated the pragmatic effects of these forms (Colston 2015; Colston & Peitz 2000), the results revealed statistically significant differences in the extent to which the three disbelief expression versions performed a variety of pragmatic functions. One function concerned the perceived degree of negativity in the referent situations. People were given appropriately counterbalanced versions of the three disbelief expression forms in a large set of scenarios and were asked to rate how bad the referent situations were. The situations commented on with the *not* forms were rated as worse than the same situations commented on by the other forms.

The explanation offered for this difference is that the *not* forms place the greatest semantic distance between the speaker and the negative event

occurring (the event did *not* occur) versus the *tell* and *believe* forms (the event *did* occur, but the speaker does not want to be told about it or the event *did* occur but the speaker cannot assimilate it, respectively).

A second kind of figurative form also appears to have a renegade status, gratitude acknowledgments (Colston 2002b). These forms are typically used to respond to statements of gratitude and also seem to have a range of figurativeness that affects important pragmatic effects. Consider the following example taken from Colston (2002b):

> Amy works in a coffee shop with Roy. Roy lives some distance from the shop and normally bicycles to and from work. One day, though, Roy's bike is stolen while he is at work. Amy, who usually uses a car for commuting, recognizes Roy's dilemma on the day of the theft and offers to give Roy a ride to his house after work. Roy heartily accepts. When Amy drops Roy off, he thanks her. For Amy to say nothing in response to Roy's gratitude would likely be unconventional. So some response is expected on her part. Amy is now in the position of using a gratitude acknowledgment.

Among the variety of utterances available to the speaker here are gratitude acknowledgments as in the commonly used, "You're welcome," and its variants from American English. Other standard responses include "Don't worry about it," "No problem," "No biggie," "Sure thing," "That's all right," "Never mind," and "Anytime."

Note that these forms also fall along a continuum of figurativeness. One extreme has utterances that, although underspecified, are generally consistent with what the speaker intends to communicate (e.g., "Don't worry about it," "Don't mention it," and "No problem" and their respective meanings: the addressee should not be concerned about gratitude, the addressee should not bother expressing gratitude, the particular favor granted or gift given by the speaker was not unduly imposing on the speaker). For instance, had the speaker from this example said, "Don't worry about it," she probably would have earnestly meant to tell her addressee to not be concerned about thanking her as a way of acknowledging the addressee's gratitude.

The other extreme of the continuum contains more figurative utterances in that the meaning of what is said typically exaggerates what the speaker intends. The hyperbolic statements used to accomplish this exaggeration typically use extreme-case formulations (Edwards 2000; Pomerantz 1986). The extreme-case formulations also typically will refer to, and possibly overstate, the degree to which the speaker would be willing to repeat whatever was originally done that earned the gratitude statement. For example, a

speaker likely may intend to communicate a reasonable willingness to assist an addressee again in some future similar situations, but the speaker overstates that willingness to include all similar future favors (e.g., "Anytime," "Whenever you need it") or even all favors (e.g., "Anything you need," "Anything for a friend"). Had Amy, for instance, said, "Anytime," she probably would have meant to express a reasonable willingness to help Roy on similar occasions in the future. But it is unlikely that she would have meant to offer absolutely any favor to Roy in the future.

As was the case with disbelief expressions, gratitude acknowledgments initially seem to belong to a standard form of figurative language. But they then stand out because of the unusual dimension that underlies their form. Gratitude acknowledgments, at least the more figurative ones, seem to be straightforward cases of hyperbole. But the specific range of the hyperbole being applied to future favor offers on the part of someone who just granted a favor gives them special status. Figurative gratitude acknowledgments serve to express a speaker's particular attitude toward or feelings about his or her addressee (Colston 2002b). In general, the more figurative (hyperbolic) the gratitude acknowledgment is, the greater is the expression of esteem, politeness, and fondness speakers accomplish with regard to their addressees.

It thus seems that certain subtypes of generic figurative/nonliteral language forms have a fairly restrained usage niche. These niches and their structures and pragmatic demands have yielded semiemergent new kinds of figurative/indirect forms that, although predominantly using the mechanisms of their generic parent categories, do so in such a way as to warrant a semiseparate consideration. The forms are perhaps becoming fixed in some of the same ways that some proverbs and idioms have. This is so in part because of the limited mechanisms of the underlying relevant continua the forms use, as well as their host contexts. But the forms have not had such historical and broad traditional usage that one would call them fully idiomatic or proverbial.

This brief treatment of embedded, blended, and renegade figurative forms thus complicates any attempt at pragmatic effect organization. Thus, rather than attempting an organization of pragmatic effects based on so-called types of figures that produce them, a listing of pragmatic effects organized loosely by their scale and prevalence will be presented. This is followed by a discussion of different kinds of figures that might trigger those effects. Of course, this opens the issue of *how* different kinds of pragmatic effects might get produced by different figures, which will be treated subsequently.

But before embarking on this list, please note that even this solution fails to completely overcome some possibly intractable problems in discussing pragmatic effects. If it is occasionally unclear exactly how to distinguish between two figures, then it may be equally unclear how to distinguish between those figures' pragmatic effects. Consider the category of anomalous effects.

Anomalous effects: As one example of anomalous pragmatic effects, note first the definitions offered by the *Cambridge Encyclopedia of Language* for metaphor and metonymy (Crystal 1997):

Metaphor	Two unlike notions are implicitly related to suggest an identity between them.
Metonymy	The use of an attribute in place of the whole.

In terms of structure, these definitions seem to afford separate designations of utterances such as

"That man is a crewcut" (3.3)
(The man is a very strict, nonquestioning, rule-following person [who does not have a crewcut]) (metaphor).

from

"Crewcut told us to leave" (3.4)
(The person whose hair is in a crewcut style told us to leave)
(metonymy – specifically, synocdoche).

In the first case of a metaphor (3.3), one thing (a person) is equated with another different thing (a crewcut). This case has the quintessential structure of a nominal A is a B metaphor. The second case (3.4), however, does not equate seemingly different entities; rather, it refers to one thing (a person) via an attribute of that person (that person's haircut). This case thus has the quintessential part-for-whole metonymic or synecdochic structure.

One would then expect that the different pragmatic effects brought about by the different figurative structures would readily follow. Metaphors, in using implicit comparisons between seemingly unlike domains, would produce the pragmatic effects those implicit comparisons trigger (e.g., to highlight the shared, emergent, blended, conceptual, or co-referential aspects of both domains). The same holds for metonymies; their use of attribute-for-whole references should cause the pragmatic effects produced by those kinds of references. Derision of the referent may be one (Colston 2015; Colston & Brooks 2008).

But it remains unclear whether the metaphoric mechanism is solely responsible for the so-called metaphoric pragmatic effects. It is also unclear, vice versa, whether the metonymic mechanism is solely responsible for the metonymic pragmatic effects. To the extent that the figures themselves are inseparable, so might be their pragmatic effects. And there are indeed cases where metaphor and metonymy, and possibly other pairs of figures, get very close, as in examples (3.3) and (3.4) (Colston 2014, 2015).

First, consider how metonymies can be metaphorical. The attribute(s) selected from a whole, to refer to or discuss that whole, in some instances can be borderline metaphorical. They could be the very thing a speaker might use as a source domain in reference to a target domain to achieve the desired metaphorical comparison. At the very least, they can conjure up much of the same semantic and schematic information that a metaphorical use of a metonymic term would trigger such that the two figures act similarly.

Thus, using the metonymy in (3.4) could trigger some of the same pragmatic effects as using the metaphor in (3.3). The word *crewcut* carries with it semantic associates and schematic correlates involving the military, conformity, blind following without thinking, lack of aesthetics, strictness, conservativeness, lack of insight/creativity, and so forth. Thus, referring to someone metonymically with that word can do similar things to using the word to refer to the person metaphorically.

As for how metaphors can be metonymic, consider the following, decidedly derogatory phrases overheard by the author:

> "He's a wingnut," overheard comment about Great Britain's Prince of Whales, Charles Philip Arthur George (metonymic metaphor) (3.5)

or

> "He's a fruitbat," overheard comment about former Iranian President Mahmoud Ahmadinejad (metonymic metaphor). (3.6)

Some may argue that these examples are metaphorical in that some physical characteristics of the source domains (wingnut and fruitbat) arguably might apply metaphorically to the target domains, respectively (some might claim that Prince Charles is somewhat cold, metallic, technical, and functional or that President Ahmadinejad is, perhaps to some Western commentators, creepy, clever, provocative, and predatory). Of course, the type of metaphor processing theory one might invoke here matters a lot – are these source domain characteristics "applied" to the referents, is a "blend" of the referent and these characteristics created, or do we run a "simulation" of

actual encounters with wingnuts, fruitbats, and so on? But the main point is consistent across different theories – these characteristics are made salient through use of the source domain terms in the metaphors.

But the terms are also metonymic in that, again, as some may argue, they can conjure actual physical resemblances between the source domains and attributes of the targets' appearance. Thus, referring to someone metaphorically with terms that also can relate to the person metonymically can do similar things to using those terms metonymically.

Of course, nonspecific instances of these same kinds of metonymic metaphors are also available. Consider the following possible comments made about an uninteresting person:

"He's a fireplug" (metonymic metaphor) (3.7)

or

"He's a jarhead" (metonymic metaphor). (3.8)

Here the metaphorical aspects can apply. A fireplug has only a singular purpose, sits idly for most of its existence, is virtually never changing, and thus not terribly interesting. A jar is transparent, visibly contains nothing inside (when empty), has a very simple cylindrical shape, and thus is also uninteresting. But these metaphorical descriptions also could apply directly to the physical appearances of the people being referred to – one person might have a thick, barrel-like body shape such that he physically resembles a fireplug. The other person might have a thick neck and a military style haircut such that the shape of his head resembles an inverted jar.

Thus, if a metonymy can function similarly to a metaphor, then is the part-for-whole structure of the metonymy raising the salience of the shared characteristics between the target and source domain? And if a metaphor can behave metonymically, then is the nominal structure of the metaphor also serving to diminish the referent entity? How, and indeed if, these structures and pragmatic effects may be separable is a very difficult matter to discern.

Complicating things further is the possibility of pseudometonymical metaphors. A person who does not have an actual crewcut who is bossing people around militarily could be referred to with the phrase

"Crewcut told us to leave" (The person whose hair is *not* in a crewcut style told us to leave) (pseudometonymic metaphor). (3.9)

Here the reference is pseudometonymic because it appears to be referring to the man by way of an attribute, but in the absence of that attribute, the reference reverts to an implicit metaphor.

It is also possible to have both full-blown metaphorical and metonymic references where metaphorical comparisons also use reference to metonymic attributes, that is,

> "That man is a crewcut" (The man is a very strict, nonquestioning, rule-following person [and he has a crewcut]) (metaphor and metonymy). (3.10)

Some interesting double entendre functions involving emergent meanings also may be afforded with these latter forms, as well as with the metonymic metaphors.

There also might be global pragmatic effect differences in these examples because of the degree of figurative meaning available. The degree of ingratiation, for instance, could vary depending on how novel and implicit both the metaphors and metonymies are. For example, a relatively explicit nominal metaphor in (3.3) seems to expect less of a listener than the relatively novel and implicit metonymy in (3.4).

The mixtures of figures could also vary according to how particularized the implicatures might be for the terms. The relatively particularized nature of the metonymic inferences versus the more generalized nature of the metaphorical inferences could itself affect the type and degree of pragmatic effects performed.

Thus there appear to be some possible differences one can tease out of metaphor and metonymy that can afford discussion of distinguishable pragmatic effects in the figures. But the figures also can be interchangeable and indistinguishable in other respects. This makes it difficult to distinguish between the pragmatic effects and which figures and their mechanisms are accomplishing them.

CATEGORIES AND CONTENTS

Difficulties also arise in most attempts to designate categories of and to assign a hierarchical or other structure to pragmatic effects. A number of different categorization schemes are available, but it is unclear how to evaluate them. Should, for instance, the causal mechanisms that presumably underlie pragmatic effects be followed as a means of organizing the hierarchy of effects? For example, effect A (e.g., enriched meaning) occurs primarily because of the nature of a figure (e.g., metaphor's highlighting of structural similarities between a target and source domain). Effect B (e.g., increased bonding between interlocutors) seems to follow directly from effect A (e.g., the addressee appreciates that the speaker took the effort to create, and presumed

that the addressee would comprehend, that enriched meaning). Thus, should effect B be considered a subcategory of effect A? Or should a broader taxonomy concerning the nature of pragmatic effects and their interrelationships serve as the guideline? For example, general effects (e.g., humor) that can catalyze, trigger, or simply co-occur with multiple other, more singular effects (e.g., increased bonding between interlocutors, alleviating tension, etc.) should be considered superordinate to those singular effects. Or further still, should a taxonomy come from other categories of human interaction (e.g., increasing intimacy, defining in-group and out-group boundaries, conveying negativity, social positioning, or social influence, etc.)?

To illustrate these categorization and organization difficulties, consider the three related but separable pragmatic effects of persuasion, derision, and humor. One figure that can and frequently does achieve all three of these is verbal irony. Although the specific causal mechanisms underlying verbal irony's pragmatic effects have not been empirically pinpointed, it nevertheless appears that the contrast between the stated and expected information is closely involved in these effects.

Were we to apply the first categorization scheme to organize these effects – following the nestings of effects under the mechanisms that produce them – then persuasion would be considered a subcategory of derision and humor. Derision and humor both seem to follow closely from the contrast mechanism of verbal irony. Positive commentary about a negative event creates a contrast such that the negative event looks worse in comparison. The juxtaposition of the positive commentary and negative event is also an incongruency that, at least in some humor theories, is a necessary condition of humor. The coincidence of derision and humor then produces the persuasion – a criticism delivered by a speaker is more likely to be accepted by hearers if the speaker is rendered positively, as would happen if the hearers were laughing.

The second categorization scheme, however, would produce a very different structure of effects. Here humor, in being generally applicable to so many different pragmatic situations, would be an overarching effect category. Persuasion then likely would fall under humor. Making people laugh is a good way to persuade them, and derision would be a parallel effect.

The third categorization scheme, in focusing on broad interpersonal interaction patters, would put the derision (expressing negativity) as the superordinate category. Humor most likely would be a parallel effect, which, when combined with the derision produces the persuasiveness.

The essential problem underlying this categorization and organization difficulty is the reversibility of many different related pragmatic effects. In

one view, effect A seems to produce effect B, but from another perspective, this causal direction can reverse. Consider again the effects of humor, persuasion, and derision. Humor can enable persuasion by stealthily shrouding the speaker from appearing negative (Colston & O'Brien, 2000a, b). In making people laugh at the same time that a negative criticism is being delivered, the negative criticism may seem to come less directly from the speaker – the humor by the speaker dilutes his or her personal negativity. Thus the criticism may seem more objective, so addressees or overhearers may be more apt to agree with the criticism and thus be persuaded to the speaker's perspective. But the reverse is also true in that persuasion can enable humor. If an addressee or overhearer is simply persuaded by some speaker's comment, he or she will find humor in this on occasion, in part as a tension relief arising from the changed position (akin to laughing at being helplessly swept along with something).

Similar reversible relationships hold between humor and derision, as well as between derision and persuasion. For the former, the same stealth mechanism of humor can enable the derision – a hearer may more likely identify and agree with some condemnation or derision if it seems more objective. This objective detachment is also achieved when the speaker dilutes his or her perceived personal condemnation by including the humor. Derision also can enable humor in the form of aggression identification or blood lust. People will, often perhaps unfortunately, find humor in the suffering of others. Finally, derision can enable persuasion in that a speaker who can make a criticism stick on a target might seem particularly insightful and masterful and thus admirable and, accordingly, persuasive. Persuasion also can lead to derision in that a person who can craftily persuade an audience on some issue appears more powerful than a target of some derision, whose social status is somewhat lessoned.

What is needed to sort out these difficulties is a greater understanding of whether these seeming causal progressions are indeed progressions at all instead of parallelisms or symbioses (e.g., humor can relieve tension, which can then enable more humor). Next would be a determination of which causal directions seem the most psychologically real or how the parallelisms/symbioses operate. The current state of theorizing and empirical evidence may not be sufficient to answer this question at present (see Chapter 6).

PRAGMATIC EFFECTS AND DECONTEXTUALIZATION

As one final problem with organizing pragmatic effects, consider their heavy dependence on and interaction with the contexts in which they

are used. It may be difficult to create even a loose categorization of such effects given that many derive their pragmatic strengths from their contexts.

An analogy would be trying to rank order how delicious different foods are in some arbitrary out-of-context comparison. Although perhaps many people would agree that chocolate (frequently a culinary treat or part of a dessert) is overall more delicious than persimmons (a not widely eaten, typically bitter fruit), such a comparison depends completely on the contexts in which the foods are tasted. Stale, unsweetened powdered cocoa tasted after having eaten an entire plate of fudge might not taste as good as a freshly picked persimmon tasted at the peak of ripeness when the perceiver is hungry.

Applying this issue to pragmatic effects, we might argue that the contrast effect that seems to underlie verbal irony in part would make it generally a more derisive figure than say metonymy, which does not rely on such a contrast effect. However, the metonymic/synecdochic mechanism of minimal or lateral reference (e.g., referring to something by mentioning an attribute of that something) appears particularly derisive when applied to people (e.g., referring to a person with the phrase "Ponytail just showed up"). In some social contexts, then, metonymy might outdo verbal irony at derision.

DELINEATING PRAGMATIC EFFECTS

Despite all the difficulties discussed earlier concerning how to separate, combine, distinguish, and categorize pragmatic effects and the figures that produce them, some generalizations are still available. One of these is to distinguish pragmatic effects that apply to the entire family of figurative language types from pragmatic effects that seem to apply to smaller subfamilies of figures or even only single types. Consider the general effects first.

General Pragmatic Effects

Some pragmatic effects may occur by the mere presence of indirectness itself in a speaker's speech (or writing).[1] These effects may not occur in every instance of figurative language, but they are arguably possible with all figurative forms. There are also doubtless instances where the effects can combine, overlap, chain, blend, symbiotically bolster one another, and interact in other very complex ways. Lastly, there may be both positive and negative outcomes in different situations where these pragmatic effects occur.

Ingratiation

This frequently discussed pragmatic effect is essentially a roundabout compliment delivered to addressees or other hearers of figurative language by a speaker. In the act of making a figurative utterance, a speaker displays his or her implicit assumption that the hearer has the capacity to comprehend and interpret the figurative utterance as intended. The hearer, in successfully achieving that rich interpretation, can realize the speaker's assumption as a wayward complement and feel an increased intimacy toward, appreciation of, and camaraderie with the speaker. Additionally, the potentially coded meaning shared by the interlocutors can increase these feelings, especially if other people are present in the context who are left out of the privileged meaning exchange. This lends some exclusivity to the interlocutors' interaction. This pragmatic effect thus essentially acts as a bonding mechanism between or among interlocutors.

Of course, such an effect can go negative for a speaker if a hearer does not wish to be complimented by that speaker, if the degree of complexity of the figure is too simple for the hearer, or in a number of other ways. Some overhearers also may react negatively if the compliment is not directed at them. In essence, any way that a form of compliment can backfire on its deliverer, ingratiation can go awry for a figurative speaker. Otherwise, though, in most instances, ingratiation is a positive process for both interlocutors.

Mastery

Another pragmatic effect seemingly germane to many, if not all, figurative forms is a kind of mastery display. Some empirical support suggests that speakers can use varying levels of sophisticated figurative language to control the display of their mastery over the situations at hand. Colston and Connelly 2004; see also Colston 2015; Kreuz, Long & Church 1991), for instance, presented people with nonfigurative, metaphorical, ironic, and double entendre comments made by hypothetical speakers in brief written scenarios. Each comment was made about some moderately negative situation (e.g., a child getting emotionally upset while playing). Different groups of people read these scenarios and comments and rated different things. One norming group simply rated the complexity of the comments made by the speakers. Another group rated the degree of humor perceived in the comments and how upset they thought the speakers were. The key findings were linear relationships between complexity and humor, as well as between complexity and composure, the latter being an inverse relationship. When speakers are faced with potentially detrimental negative situations against which a

strength or mastery display would be fortuitous for the sake of social status management, a relationship arises between the complexity of the figurative verbal responses of the speakers and the degree of composure the speakers are perceived as experiencing. The more complex the utterance, the more composure that is displayed.

A *cognitive surplus display hypothesis* (Colston 2015) was proposed to explain how figurative language accomplishes such a mastery display. When encountering emotionally tumultuous, frequently negative (although not necessarily so) situations that have an adverse or at least stressful impact on speakers, figurative forms of language can be used to socially demonstrate the speaker's mastery over such situations. The figures afford this demonstration (1) by requiring a degree of skill on the part of the speaker to produce the figure relative to a nonfigurative, more direct form, (2) by somehow efficiently capturing via the idiosyncratic mechanisms of the figure some aspect of the structure or form of the encountered situation, and (3) by revealing in the use of such a figurative utterance a degree of surplus cognitive wherewithal not being taken up by the speaker's cognitive and emotional response to the negative situation. This cognitive surplus demonstration is in essence a strength display that, along with the other achievements of the figure, effectively convinces listeners and witnesses that the speaker has some mastery over the situation at hand.

As with the other general pragmatic effects, mastery display can go awry, perhaps if a speaker overplays his or her hand such that the figurative utterance in fact betrays a *lack* of composure, akin to whistling too loudly in the dark to calm one's fears. A speaker also might appear to be too masterful and be taken as arrogant, uncaring, flippant, domineering, unjustly superior, or something similar. As with ingratiation, though, mastery display is typically a relatively positive pragmatic function.

Persuasion

Persuasion is a very generic term for this general pragmatic function; other terms also might be used with respect to the meaning conveyed in a figurative utterance, including *strengthening*, *enhancing*, *condensing*, *deepening*, and others. This broad category of effects constitutes essentially the primary reason for why figurative language exists and is used by speakers. Whether an enrichment of meaning as in a metaphor, a highlighting of a discrepancy between expectations and reality as in hyperbole, or a powerful recrimination with a verbal irony or something else, all types of figurative language provide some kind of meaning enhancement in a typically relatively compact package. The type and extent of enhancement, of course, vary greatly

across all figurative forms, but they all do some form of it. It also contributes to the ingratiation and mastery pragmatic functions discussed earlier. Of course this effect also can backfire on a speaker if the meaning conveyed is obvious, if the cleverness of some figure is trite, as in puns, or in a number of other semantic and social ways.

There may even be a very broad, powerful generic negative outcome in this pragmatic effect in overall figurative language use – *figurative outing*. On occasion, perhaps with certain subcultural groups, when social competition is heated or if a figurative utterance is particularly novel or extended, a hearer may undercut a speaker's attempt at figurative meaning. The typical strategy is to attempt an "outing" of the figurative form as being meaningless, loose, inaccurate, unclear, or, at worst, flakey, stupid, and misleading. This outing is achieved perhaps by repeating the figure out of context with a derogatory expression or in some other way eradicating the figure's rich interpretive support.

Consider the following true example: at a social gathering of academic colleagues from different disciplines, a psychologist was describing the nature of her discipline to a faculty member from geosciences. To express the extremely diverse nature of psychology, which comprises both a wide array of scientific subdisciplines ranging from functional neuroscience through animal cognition, social behavior, human development/aging, personality, violence, sensory studies, and so forth to an entire scientific and applied mental health practice half that constitutes clinical psychology, the psychologist made the following comment:

"Psychology is a platypus." (3.11)

The geoscientist, who until then had been attentive and friendly, immediately stiffened, took on a facial expression that was part incredulousness and part sneering amusement, and then repeated the comment, looking over the top of his glasses, with an extremely skeptical tone, as if to preface the quote with, "You honestly expect me to believe that?!" It was not as if the geoscientist was questioning only the metaphor itself. Rather, he seemed to doubt the validity of the *use of* metaphor per se, implying that the psychologist was somehow making a wildly inaccurate or erroneous statement – the worst possible thing a scientist could do, in his opinion.

Although this technique can be effective as an undercutting tool, its success comes at a great irony in that much of normal everyday language is figurative or at least indirect in some occasionally subtle fashion. Moreover, the inherent underdeterminedness of all language never escapes the implied imprecision criticism as well, even if the cognitive work always required of

all language comprehension is often shrouded. Nonetheless, witnesses can be persuaded with this technique – that so-called nonfigurative language is somehow more basic or solid than figurative language. The general pragmatic effect of persuasion thus can collapse for a figurative speaker in these situations.

Social Engineering

This pragmatic effect is a collection of rich, subtle social positioning maneuvers that many kinds of figurative language (arguably all) achieve for a speaker. Whether landing a criticism on a target while stealthily avoiding the appearance of negativity with verbal irony (e.g., "You sure do know how to treat a lady") or deftly positioning a referent at a particular station amid a broad social array with a metaphor (e.g., "He's a total boy scout"), many figures allow speakers to engineer, to a point, the social status of the people around them. Certainly this pragmatic effect is tightly linked with mastery. At times, the two even may be indistinguishable. But they're labeled separately here to highlight how some figurative language can achieve social positioning on people other than the speaker.

Catalyzation

This is another pragmatic effect that could have several other possible labels. It essentially applies to the degree of social interaction among interlocutors using figurative language. Other terms could include *inviting conversation* (Long, Kreuz & Church 1989), *lubrication*, and *invigoration*. The idea is that figurative language can activate and enhance the thinking of interlocutors (Vlastos 1991), can prime additional figurative language productions (Gibbs 2000; Corts & Pollio 1999), can invoke deeper understandings by hearers, and in some cases can reveal interlocutor attitudes toward relevant content beyond mere semantic meaning exchange (see Colston & Gibbs [2002] for a summary). All this rich interaction can be self-perpetuating such that the overall degree of shared consciousness among interlocutors is greatly increased. Indeed, often the social tension release achieved by this rich sharing (e.g., "breaking the ice"), closely interacting with the ingratiation mechanism, further enables shared meaning among interlocutors.

Efficiency

The pragmatic function of efficiency is a very subtle one. Overall, figurative language is efficient in that it can convey much concentrated meaning with relatively little quantity of language (Boerger 2005; Clark & Wilkes-Gibbs 1986; Fussell and Krauss 1989a, b; Krauss and Fussell 1991a, b). However,

because this effect does not really *expand* what a hearer experiences in comprehension in the way that other broad effects seem to achieve (e.g., when a hearer comprehends a metaphor, he or she gets the figurative meaning *and* finds the speaker masterful), it does not seem quite as noticeable as other effects. The efficiency does, however, act internally on the meaning being conveyed and thus can accomplish things for speakers and hearers that other pragmatic effects also accomplish.

For example, if a speaker finds a very apt metaphor to get some difficult, complex meaning communicated rapidly, he or she has gotten the interlocutors across a potentially stagnating inability to exchange meaning. This itself can enhance further communication. Of course, the effect closely interacts with the other general effects (an efficient speaker is seen as masterful; getting meaning across rapidly and compactly can catalyze interaction; etc.). But it is also its own effect in making shared meaning happen rapidly and readily.

As with all the other general effects, efficiency is predominantly a positive thing for interlocutors. But it can have a negative side in a few ways. Occasionally, figurative interlocutors can be almost too efficient in that they overwhelm themselves with too much meaning exchange. Or one speaker outpaces an interlocutor and then is left frustrated at not being able to use the rapid pace that the other person cannot handle. The interlocutor, in turn, is left overwhelmed.

Pragmatic Effects Specific to Single Figures or Figure Families

Other pragmatic effects are less global in that they occur only with certain sets of figurative forms (e.g., idioms or proverbs), with families of figures (e.g., verbal irony/sarcasm, rhetorical questions, and sarcastic praise), or even with just individual figures (e.g., asyndeton). Let me restate here that these pragmatic effects are by no means deterministic. Nor will they be uniformly strong across all instances of use of a figure. A figure's social, semantic, and other contexts will greatly influence the presence and extent of its effect, as will the accompanying mixture of pragmatic effects that gets initiated by use of that figure. These effects nonetheless are often associated with the figure(s) listed. Indeed, the effects may be the reason for existence of some figures.

Expressing Negativity

One of the more prevalent pragmatic effects is the expression of some form of negativity (Kreuz, Long & Church 1991; Roberts & Kreuz 1994). This negativity could be a condemnation of a person or his or her actions, a

complaint about some state of affairs, a derision of some person or thing – possibly for purposes of social posturing or positioning, an insult, simply a negative commentary, or many others. As argued in Chapter 2, figurative language also serves this pragmatic effect very well because it affords the negativity expression but can simultaneously reduce, shroud, or minimize unwanted side effects that accompany the negativity. These side effects could involve threats to face, negative blowback, and others.

A wide variety of figures accomplishes a negativity expression as a more or less exclusive function. Other figures can express negativity under certain conditions. Among the more exclusive negativity-expressing figures are some different forms of *verbal irony*, as in sarcasm: "Nice weather you've got here" (see Gibbs & Colston [2007a] for a review). Indeed, the contrast mechanism frequently underlying verbal irony makes it particularly strong at negativity expression (Colston 2002a). However, the tinge mechanism arguably can make verbal irony particularly good at stealthily protecting a speaker from negative blowback (Dews & Winner 1995; see also Boylan & Katz 2013). *Hyperbole*, whose typical use is to point out discrepancies between expectations and reality, certainly can apply to positive situations. Perhaps it expresses surprise at one's good fortune (Colston & Keller 1998), but it is mostly used in negative situations, as in "This shift is never going to end." Indeed, complaining about things not turning out as expected or desired makes hyperbole one of the earliest-appearing figures in production and a primary expressive tool for children (Colston 2007). *Asyndeton*, as in "I went, I ate, I left," and *synecdoche*, especially when used for personal references, as in "Moustache is waving at you," use interesting, although different, minimalist mechanisms for derision expression (Colston 2015; Colston & Brooks 2008; Colston & Jindrich 2000; Lusch & Colston 2000). Synecdoche, in using its attribute-for-whole reference mechanism, also can express negativity by ignoring a person (e.g., via a proximal label: "Front-of-the-line can't find a wallet"). Or it can attend to some unusual physical characteristic of the person (e.g., if the person has large ears: "Ears wants an ice cream cone"). *Disbelief expressions*, as in "I did not just lock my keys in my car," similar to hyperbole, can be used in positive situations. But they, too, are predominantly used to express negativity. Indeed, their primary purpose seems to be managing the degree of negativity expressed (Colston 2015; Colston & Peitz 2000). *Ironic restatement*, as in "Oh yeah, Ronald Reagan was definitely president in the 1970s," provides an interesting twist on a negativity expression. Ironic restatement not only expresses the negative regard for the erroneous original comment that is repeated, but it also expresses that the error should not have been made by

the speaker of the comment in the first place (Colston 2000a). Finally, the coupling of a person's assertion with an ironic analogue is a common tool used in *rebuttal analogy*, as in

> "Calling Chilies just another steakhouse is like saying the Great Wall of China is just a fence" (actual [although not necessarily verbatim] radio commercial for a restaurant chain in the United States [Colston 2010]). (3.12)

This figure serves very well not only to belittle or deride the idea in the target of the analogy but also to affect the person who initially proposed it (Colston, 1999, 2000a; Colston & Gibbs 1998).

Other figures also can clearly express negativity in certain contexts, such as use of a *metaphor* for derision, as in "This town is an armpit." But their dominant function is not for negativity expression per se. Additional figures that follow this pattern are *idioms*, as in "This team is going to bite the dust"; *proverbs*, as in "It's always calmest before the storm"; and certain *contextual expressions*, as in the overheard "The duck hunter pulled a Dick Cheney," "Adventures in Duck-Dynasty land," and others.

Enhancing Meaning

On some level, as argued earlier for general pragmatic functions, all figures enhance meaning in some way. Here, though, the more specific sense of an enhanced semantic meaning brought about most prominently by *metaphor* is intended. Metaphors, as in "Metaphors are goldmines," perhaps more than any other figure have the ability to poignantly capture very rich semantic and schematic meaning in a very concise package. For this reason, they have arguably attracted the most attention by scholars, resulting in an abundance of theoretical and empirical work aimed at trying to explain their comprehension and use.

Metaphors are also arguably the most blended forms of figurative language in that they appear in verbal irony, idioms, proverbs, hyperbole, and practically every other kind of figure in some instances. The centrality and power of the meaning-enhancement pragmatic function are also arguably the reasons for much of this extension.

Highlighting Discrepancies

Very closely related to the negativity expression function is the pragmatic effect of highlighting discrepancies, typically between expectations, preferences, desires, and the like versus actual ensuing events. Although bringing attention to such discrepancies is frequently the means used for expressing

negativity, other times the mere reference to the discrepancy is the primary goal of a speaker of a figure. Still other times the discrepancy is referenced for emotional expression or other related functions (Kreuz, Long & Church 1991; Utsumi 2007).

The family of *verbal irony* figures is probably the biggest conveyer of this pragmatic effect in that these figures typically juxtapose those violated expectations and/or preferences directly with reality, as in saying "Nice place you got here" about someone's filthy apartment. In addition to the negativity expression effect, though, verbal irony is very powerful at bringing to light discrepancies that might otherwise go unnoticed. A true example witnessed at a university's academic senate meeting demonstrates this nicely: a proposal for a cross-curricular set of writing requirements had been made that would have required a lot of interdepartmental interaction – something that many academicians know can be tremendously difficult to bring about. Someone in the senate voiced this observation, pointing out that the proposal "would require *far* too much communication, negotiation, and cooperation between departments to work." A different speaker then cleverly and quickly quipped, "Oh no, we can't have *that*!" In this speaker's use of irony, the primary goal seemed to be highlighting the complacency with which academic disciplinary isolation is accepted and how such a dearth of interaction and cooperation is a deviation from a preferred norm. The speaker also may have wished to deride this isolation and those who desire or perpetuate it. But, perhaps given the humor produced by the remark, derision seemed more secondary to the goal of simple discrepancy demonstration.

Hyperbole also exceeds at this discrepancy-highlighting function and also not exclusively for negativity expression. Hyperbole can be used to express that an action by someone, although positive in nature, is admirably and out of the ordinarily positive, as in "This is the nicest thing anyone has ever done for me."

Objectification

This pragmatic function is achieved by a number of figurative forms. It usually works in service of strengthening a parallel pragmatic function such as persuasion. Relatively fixed figures such as *idioms* and especially *proverbs* are particularly good at this effect. They can leverage the widely known consistent pattern of the forms (Honeck 1997). For example, a speaker using a proverb such as "Don't count your chickens before they're hatched" seems to be extolling the virtue of caution or conservativeness. But this extollation appears relatively objective because the proverb is a well-established

colloquial American English fixed phrase, external to the speaker, with which many people are familiar. Use of these figures thus often acts simply as a mentioning or reference to preexisting cultural values that are ensconced in the fixed phrases. They are thus external to the speakers rather than arising from the speakers themselves.

Objectification can aid persuasion because the source of the extollation is broad, well-known, preexisting, external, and has a history rather than just a fleeting opinion of one speaker. Hearers and addressees thus are more likely to be influenced by it. The objectification also removes any direct social influence or domination/subordination phenomena that might arise were the hearer just obeying what a speaker told him or her to do. This also enhances the persuasiveness of the figure.

Identification

Another pragmatic function achieved by relatively fixed forms of figurative language, again like *idioms* and *proverbs*, as well as by more fleeting ones such as *contextual expressions*, is identification or alignment. This effect serves to indicate some characteristic about the speaker, such as his or her cultural background, identification, or association. Speakers might use fixed figures in English lingua franca situations, for instance, as a means of showing or attempting to show themselves as familiar with the English language. Fixed expressions also can indicate identification with a particular culture that speaks English (Firth 1996; Kecskes 2007; Kecskes & Papp 2003; Kecskes & Mey 2008; Seidlhofer 2009).

Speakers also might use more culturally embedded contextual expressions to demonstrate knowledge of or alignment with some subculture. As one example recently overheard, two people were discussing the sexual orientation of a friend of theirs. One person thought the friend was homosexual and asked the other person if this was the case. The second person responded that the friend was actually straight and then hastily added the contextual expression, "Not that there's anything wrong with that." This phrase, taken from the popular syndicated American television program *Seinfeld*, actually in reference to people who *were* homosexual, thus served to indicate the speaker's identification with the program. It also indirectly expressed the speaker's admirable lack of prejudice or homophobia.

Humor

Humor is clearly a pragmatic effect brought about by many kinds of figurative language. Indeed, the indirectness per se of *all figurative language* itself could trigger humor – given the reduction in veridicality and resulting

discontinuity that accompanies indirectness and figurativeness. One thus might consider humor as a member of the category of *general effects*. Given that many figures express negativity, however, humor may not be as reliable a general effect as others in that category – hence its listing here. Sometimes humor also seems, as does objectification, to strengthen parallel effects. Other times it may just be an epiphenomenon of the figure. Humor even may arise as a consequence of some other effect. For instance, if a hearer appreciates the ingratiation effect discussed earlier, he or she may experience humor as a form of happiness at the indirect compliment. All told, the relationship between humor and figurative language is one of enormous complexity. It entails diverse patters of causal effects holding between a given figurative form; the cognitive and pragmatic processing that underlies its production, use, comprehension, and interpretation; and the resulting experience and expression of humor (see Gibbs, Bryant & Colston [2014] for one explication of this complexity in verbal irony).

Emotion Expression/Elicitation

Many kinds of figurative language have the pragmatic effect of both expressing a speaker's emotion and eliciting (the same or other) emotional states in hearers. For example, *verbal irony* is often used to reveal a speaker's typically negative attitude toward some referent topic (Colston 2002a; Gibbs, Leggitt & Turner 2002; Link & Kreuz 2005). *Asyndeton* and *metonymy/synecdoche* also can express negative attitudes (Colston 2015; Colston & Brooks 2008; Colston & Jindrich 2000). *Hyperbole* and *verbal irony* can reveal a speaker's surprise (Colston & Keller 1998). *Understatement* can reveal a moderated level of negative emotion on the part of a speaker (Colston 1997).

Positive emotions also can be expressed and caused by many figurative forms, and indeed, emotions can even be mixed (e.g., delight at how a metaphor, when produced and comprehended, captures subtle meaning nuances in the referent topic coupled perhaps with more negative responses [i.e., fear] to obtaining the metaphor's meaning, as in "The US bank bailouts, without financial reform, were just hitting the snooze button on the US economy"). Or consider the mixture of emotions invoked by the following cleverly dense metaphor from Richard Russo's novel *Straight Man* (1997):

> "Everyone, including Finny, who brought to meetings he chaired the emotional equilibrium of a cork in high seas, looked on, bug-eyed." (3.13)

Readers may experience pleasure at obtaining the rich meanings encapsulated in this metaphor, accompanied by feelings of resignation or worse at

conjured memories of experiences with similar people. Emotions of admiration and fondness also may occur through appreciation of the author's insight and communication skill.

The power of some forms of figurative language at eliciting emotion is also pronounced. One could argue that some figurative forms *implant* emotions in hearers/readers. The meaning-enhancement effect of metaphors, for instance, does not just trigger enriched meaning. Metaphors also can produce powerful emotions, both negative and positive, as evidenced in many uses of metaphor in moving speeches, song lyrics, advertisements, political messages, propaganda, poetry, and many other genres.

Extollation

Highly related, although somewhat separable from objectification, this pragmatic effect is also often achieved by figurative and other language that has relatively fixed forms (Gibbs & Colston 2007b). *Proverbs*, *idioms*, *aphorisms*, some *colloquialisms*, and other fixed expressions frequently can capture, analogously or otherwise, some truths about the world whose expression serves to advocate some belief, attitude, personality characteristic, or behavior. For example, a speaker might use the proverb

"A bird in hand is worth two in the bush," (3.14)

which analogously states that possession of a single sought-after thing is more valuable than the opportunity to gain (but parallel risk to lose) multiple sought-after things to extol gratefulness, satiation, conservatism, and lack of greed or hoarding. Although many other figures also can extol, such as *metaphors* that equate jealousy with green-eyed monsters and *verbal irony* that espouses a cynical wariness, the objectification (see earlier) provided by the more fixed forms particularly helps them at this effect. If the belief or attitude being extolled seems to originate outside the speaker and reside instead in the broader world, hearers/readers are more likely to be receptive to it.

Politeness

Politeness is involved in several general pragmatic effects already mentioned, including social engineering, ingratiation, and some specific ones such as expressing negativity (or, more precisely, the side effect of diminishment that can co-occur with expressing negativity figuratively). But politeness is also specific to some individual figures. *Euphemism* is one figure where politeness is central (Pfaff, Gibbs & Johnson 1997). Speakers using euphemism discuss typically taboo, disgusting, or socially impolite topics

(e.g., sex and bodily functions) with language that is spun more positively. Consider a speaker saying "She's not quite herself this evening" instead of a direct statement that she is vomiting. *Indirect requests* are also intimately tied with politeness. Indirect requests, as in saying "Would you mind if I used your phone?" are polite in the face-saving aspect of their indirectness, but they are also polite in their typical pinpointing of the obstacle most likely in the way of the addressee granting the request. This reveals consideration on the requester's part (Gibbs 1986a, b, 1987).

Impoliteness

Beyond just the mere expression of negativity already discussed, some figurative forms also excel at more subtle forms of impoliteness – usually at the service of some additional goal (e.g., scolding a person for something, changing attitudes, or altering a person's future behavior). For instance, consider how some fixed forms and their inherent tendency toward objectivity might render their use impolite but meaningful accordingly. Imagine a person experiencing some significant trouble in his or her life who seeks counsel and comfort from a friend with a heartfelt and emotional plea for personal assistance. Were that friend to respond with a *canned proverb* or *idiom* (e.g., saying "There are plenty of fish in the sea" or "This too shall pass") – essentially opting for an external, objectified source of succor after having been implored for a more intimate personal level of assistance – he or she likely would be taken as impolite or aloof. Of course, a speaker also might use this kind of impoliteness to indicate that he or she feels that the petitioner is presuming too much intimacy, asking for too much assistance, or behaving too weakly.

A similar reaction likely would ensue from any response using noncommittal or ambiguous indirectness. For example, imagine the same example with the friend replying "Must be rough." For this response, though, the impoliteness is perhaps due more to a *withholding* of politeness rather than an appeal to objectivity. A neutral comment that states the obvious and withholds great sympathy or empathy thus can also serve to indicate that the too-forward attitude of the petitioner is not appreciated by the responder, that the asker is weak, and so forth (see the section "Machiavellianism" later for a broader treatment of this process as a pragmatic effect it its own right).

Rhetorical questions are frequently used impolitely as a means of scolding someone for behavior or ideas considered inappropriate by the speaker (e.g., "Why do you think I drove all the way down here?" "Are you listening to me?" "When were you going to tell me about this?" and "Are you ever going

to grow up?"). Indeed, the indirectness of rhetorical questions, through the increased involvement demanded of addressees – simultaneously having to consider and suppress an answer – seems intricately involved in the effectiveness of rhetorical questions at scolding and persuading (Blankenship & Craig 2006; Blankenship & Holtgraves 2005; Craig & Blankenship 2011; Petty & Cacioppo 1986, Petty, Cacioppo & Heesacker 1981).

Ironic restatement, or the resaying of another person's erroneous comment to demonstrate the speaker's error, as in the famous 1948 photograph of President-Elect Harry Truman holding up the Chicago newspaper with the incorrect headline, "Dewey Defeats Truman," is also a form of impoliteness used to scold. But ironic restatement goes further. It has the added pragmatic effect of expressing that the speaker/writer of the erroneous comment should not have made the error in the first place (Colston 2000a).

To the extent that *verbal irony* uses echoic mention or pretense mechanisms to target a particular victim of the irony, as in mocking a particular person and/or his or her comment, impoliteness is also at play in molding behavior (Gibbs & Colston 2007a). Much has been said about a contrast effect in verbal irony that can render a target person or situation more negatively. But pretense and echoic mention mechanisms achieve an additional degree of negativity expression through direct personal impoliteness – outright mockery of a specific person by derogatorily portraying either that person or his or her commentary. Pseudoquotes in parody or echoic-reminder-based irony also can invoke the punitive or mocking nature of quoting in irony proper to render an artificial quote the negativity of an actual repeated erroneous commentary (Kotthoff 2002).

Indirectness itself also can serve to mediate the degree of impoliteness expressed. Consider the potentially varying degrees of impoliteness by a person implying versus stating that someone's performance at something is bad (e.g., as in saying "This tuna salad is awful" versus "This tuna salad *you made* is awful"). Expressing the ownership of the failure as an implicature versus direct statement puts the burden of realization on the addressee, possibly affecting the negativity expressed accordingly (Poggi, D'Errico & Vincze 2011, 2015) or at least offloading some of the accusation from the speaker.

Indirectness also can work stealthily to allow both polite and impolite messages, or at least it can afford messages with differing tones of polarity to be expressed simultaneously. Consider *manipulative arguments*, a mainstay of political discourse (Andone 2013; Culpeper 2011; de Saussure 2013; Lunsford 2014; Pinker 2008). Speakers, frequently politicians, regularly

manipulate plausible deniability to deliver potentially positive or neutral surface messages with simultaneously sultrier messages coded within. Consider the differing readings of a comment used multiple times during the 2008 US presidential election campaign:

"Putting lipstick on a pig" (and variants). (3.15)

Senator John McCain used it in October 2007 and again in May 2008 as part of a criticism of Hillary Clinton's health care plan – arguing that her plan was no improvement over the failed one she developed as first lady in 1993 (Covington & Curry 2008). Barak Obama then used a version of it in September 2008, purportedly as a criticism of John McCain's pretending to promise change but instead perpetuating Bush administration policies. Others argued that Obama's comment was a thinly shrouded insult directed at vice presidential candidate Sarah Palin, who had referred to herself as wearing lipstick roughly a week earlier at the Republican National Convention – joking that all that separated a hockey mom and a pitbull was lipstick while pointing to her own bright lipstick (Zimmer 2008). Obama responded to the criticism, referring to multiple uses of variants of the term by many politicians, including Sarah Palin's running mate John McCain, just weeks previously.

Metaphors for people or other things commonly use animals as source domains, on occasion as terms of affection (e.g., "He's my little koala bear"), but also frequently as a means of impolite derision (Haslam, Loughnam & Sun 2011; Leach 1964; Mateo & Yus 2013; Walaszewska 2014). Whether by leveraging undesirable characteristics of particular animals in reference to people or things (e.g, "He's a skunk" or "My car is a turtle") or by the general view that animals are somehow lesser in epistemic quality than people (Lakoff & Turner 1989), metaphors can render referent target domains a moderate to severe taint of vivid negativity (Johnson & Malagady 1979; Ortony 1975).

A number of other figurative forms also can achieve a very weak form of impoliteness that is interestingly often shrouded by a parallel and frequently strong humor function – as in *ironic* or *parodied proverbs, quotes, idioms*, or other relatively *fixed phrases* (see also *antiproverbs*) (Litovkina 2009, 2011; Mieder 2008). Although these parodied terms are typically amusing, their humor comes at the expense of the central parodied proposition, adage, or lesson. The moral itself is rendered negatively in some form, if only as the butt of the joke. Consider several examples of antiproverbs taken from Mieder (2002):

"If at first you don't succeed, you're fired." (3.16)
"All work and no play makes you a valued employee." (3.17)

"Where there's a will, there's a loophole." (3.18)
"Do onto others before they do onto you." (3.19)

Tension Reduction
This pragmatic effect can be brought about via several different mechanisms from several different figures. *Dysphemisms*, crude *profanities*, or other figures and, indeed, *all figures* to the extent that they are considered informal modes of talk in certain contexts can reduce tension in social situations by breaking down potentially excessive formality. The social bonding mechanisms such as ingratiation and others also can contribute to tension reduction. All else held equal, the extent to which interlocutors are emotionally close and socially trusting of one another, the less likely it is that there will be tension between them. Also, the humor produced by many figures can make people feel more relaxed, and the catalyzation general effect can contribute to tension reduction through its variety of mechanisms.

Two related tangential points are worth making here. First, as discussed earlier, cascading mechanisms can be at play in figurative forms and the pragmatic effects they can produce. Although use of some figures results more or less directly in some pragmatic effect performance, it is also possible that pragmatic effects themselves can produce other pragmatic effects. The humor leading to tension reduction is just one of many possible such chains. Also possible, although somewhat speculative at this point, is, that this kind of cascading might be involved in *chaining* of figures, where speakers in conversations will frequently contribute to sequences of similar figurative forms (Corts & Pollio 1999; Gibbs 2000; Kotthoff 2003). It is possible that the psychological states of interlocutors, brought about in part by the pragmatic effects produced by some figurative contribution, somehow prime subsequent similar figurative contributions by those interlocutors. This could perhaps serve to rekindle, maintain, perpetuate, reciprocate, or outdo the conjuring of those particular pragmatic effects and psychological states. *Trumping* – the process of continuing but altering a pragmatic frame (such as a figurative construction or schema) across conversational turns – seems to be a particularly good example of this (see Chapter 4).

Machiavellianism
This pragmatic effect is carried out in a couple of different subtle ways. It would *not* take place most likely if speakers were simply disguising their intended meaning to an addressee through the use of some figure (e.g., complimenting an addressee's clothing when the actual intent is sarcastic). In this instance, there is no additional meaning being leveraged by the

speaker's use of the figure. But machiavellianism *would* likely arise if an overhearer were made privy to this deception. Here the pragmatic effects are the full knowledge about the situation and speaker in the overhearer, a kind of potential bonding between the overhearer and speaker as a result of the special inclusion, and possibly a special instance of mastery display and social engineering (putting the addressee down and elevating the overhearer). Of course, the latter two could readily backfire if the overhearer were not comfortable being partnered in the deception and inherent insult.

Machiavellianism also can arise if a speaker does not enable clarification of which of several meanings is intended in an ambiguous utterance or if no clear meaning is available in an utterance (see also the section "Impoliteness" earlier). For example, imagine that a speaker makes a claim about something, and an interlocutor replies

"Yeah, that might be true." (3.20)

It seems unclear from this response whether or not the interlocutor agrees with the claim. In leaving the interpretation open, the interlocutor puts the speaker in a weak position by not knowing how to proceed in the conversation because he or she does not know the interlocutor's stance with respect to the original claim. If the speaker assumes either agreement or disagreement, he or she could be wrong and appear foolish. Thus the speaker is often held in a position of ignorance and paralysis, at least for a while. This complex state of affairs in speakers enables interlocutors to keep their intentions hidden. An interlocutor also can put the speaker (and overhearers) at a disadvantage accordingly.

Anomalous Pragmatic Effects

Although all figures can accomplish multiple and sometimes unusual pragmatic effects, they nonetheless seem to have one or two dominant effects that are their strength. There are a few figures, though, that do not seem to have singular or small sets of pragmatic effects regularly associated with them. Consider as the first example *oxymoron*, as in

"Take your time, but hurry it up." (3.21)

This relatively understudied figurative form (although see Gibbs & Kearney 1994) seems to use the contradictory juxtapositions of meaning found in verbal irony. Oxymorons are typically less negative than verbal irony, though, because their contradictory propositions do not as readily correspond, respectively, to expectations and reality as verbal irony. Thus the juxtaposition does not seem to serve the general purpose of complaining

about the unexpected or undesirable nature of current events by juxtaposing them with the better, expected, or desired ones. Oxymora, rather, often simply couple different states of affairs from the world that often do bear the difficult-to-define contradictoriness, contraindicatedness, or bicoherence relationships also found in irony (see Colston & Gibbs [2007] for a review). But, again, they do not accordingly present a clear correspondence of these states of affairs with expectations and reality. Other classic oxymoronic phrases such as

> "You can have any color you want so long as it's black," (3.22)
> "Hurry up and wait," (3.23)
> "Shut up and sing," and (3.24)
> "She's killing me with kindness." (3.25)

further demonstrate this form. An interesting characteristic about oxymora, though, is that the particular pragmatic effects they produce seem very subtle. They also vary widely across different contexts without an obvious common denominator holding among these effects. The general mechanism that seems to underlie oxymora is an apparent contradiction between two mutually incompatible propositions. But then a parallel different set of senses of those propositions that can be more compatible is conjured. The nearest thing to a common effect produced by such a mechanism might be noticeability resulting from distinctiveness that can produce humor and/or memorability, all of which can aid their persuasiveness. But these are not really unique or distinctive pragmatic effects.

Consider, for example, a speaker saying, "Take your time, but hurry it up" or "You can have it in any color you want so long as it's black." Both of these seem to have contradictory propositions at play (e.g., having time versus needing to rush and having a broad selection versus having no selection). A closer consideration, though, allows senses that can be less contradictory (e.g., you can take your time, but you had better be quick about deciding to do so, and you can choose whatever you want, but there is really only one option available).

Hearers, however, probably do not have to compute the more compatible set of senses to interpret an oxymoron. The juxtaposed contradictory set of senses itself seems to convey meaning. And indeed, the more compatible set of senses may just be an artifact of the juxtaposed contradictory states. Because genuinely fully incompatible states are usually not possible in the real world (e.g., my drink is both boiling and frozen at the same time), some more compatible interpretation of an oxymoron that seems to state such an incompatibility is usually derivable, for instance, a speaker saying "Icy hot"

in response to a question about his or her drink (e.g., "My hot tea has cold ice cubes in it").

However, the juxtaposed seemingly contradictory set of propositions still does different things in different contexts. In the "Take your time but hurry it up" and the "You can have any color you want so long as it's black" examples, for instance, a very slight ironic negation on the initial propositions seems to arise. It is akin to sarcastically saying "Oh, sure, let's put our feet up and rest" when haste is of the essence or "Let me just get out my checkbook and give you anything you want" when the speaker has no money. The pragmatic effects here could be a mild derision or belittlement of those initial propositions ("Take your time" and "You can have any color you want") to subtly bolster or emphasize the latter ones ("Hurry it up" and "It's black"). Speakers also can achieve a very irony-like sugaring of a pill in getting a hearer to accept the latter somewhat face-threatening or undesirable propositions (in one case, a command to move faster and, in the other, a statement of one's having very little freedom of choice).

In other instances, though, there does not appear to be any ironic negation. Rather, a mere representation of an oxymoronic contradiction out in the context seems to occur. Consider "Hurry up and wait." This oxymoron is often used to describe the oscillating pattern of rushing and waiting that people encounter in many complex institutional, organizational, or bureaucratic settings (e.g., hospitals, air travel, government offices, and military training). There thus does not seem to be a very strong or unique pragmatic effect in this usage other than the aforementioned humor, noticeability, and so forth. The same holds for "Shut up and sing." This oxymoron could apply to a person with great singing ability but poor speaking skill.[2] Again, it does not seem to negate or bolster either of the contradictory propositions. Rather, it is merely a statement that the person can sing but cannot converse.

In still other situations, an oxymoron can tap into broader proverbial kinds of knowledge such that the oxymoron might gain a slight objectification effect. Consider "She's killing me with her kindness." Here again, both a seeming contradiction (kindness is a good thing to do to a person; killing is a bad thing) and a more compatible set of senses are at hand (kindness is a good thing unless there is too much of it and it can then become a bad thing). Here, though, the contradictory set of senses can tap into the broader knowledge that too much of anything, even something good, can become negative.

One interesting note to make about these differing kinds of oxymora is that the simple sentence structures may contribute largely to their differing

effects. In the two examples that support an initial proposition negation, the propositions are separated by a contrasting coordinating conjunction or a conditional, that is, "but" and "so long as." The two examples that merely capture seeming contradictions in the world use the conjunction "and" to separate their propositions.

Many oxymora also can act tautologically. Akin to tautologies such as "That's that," "Boys will be boys," and "It looks it" that can invite a supercharged search for optimal relevance, some oxymora can force a comprehender to find referents and senses of propositions that can align given the seeming contradiction. As argued earlier, it is not clear if optimal relevance resolution in oxymora comprehension is necessary for their comprehension. The mere contradiction itself carries meaning. But it could still take place.

The second kind of figure that does not seem to have singular sets of pragmatic effects with which it is regularly associated is *double entendres*. Indeed, one might consider double entendres to be a broader category that includes oxymora. With oxymora, the multiple meanings are contradictory in at least one set of senses, but double entendres can include a wide array of pairs (or triplets or more) of meaning types joined in an utterance or phrase. Sometimes the meanings are both nonfigurative. Sometimes one meaning is nonfigurative and one is figurative. Other times one meaning is just a coincidental homophone (a hair salon named "Shear Madness"). Indeed, virtually any kind of pair of meanings may be found in a double entendre. As for their pragmatic effects, however, a great deal of variability seems to arise according to the particular usage. Other than mild forms of humor, perhaps mastery display, or a heightened search for optimal relevance, there may only be one other borderline pragmatic effect associated with double entendres. They can, on occasion, produce a semiemergent third meaning that stems from the coincidence that the two occasionally very different meanings in the double entendre happen to reside in the same surface form of the utterance/phrase. This could contribute to ingratiation, memorability, or other things. Again, though, overall there does not seem to be a particularly unique or novel set of pragmatic effects to double entendres as a class of figure. This could indeed be why some people find some double entendres to be low brow and annoying.

CAUSES OF PRAGMATIC EFFECTS

Any discussion of causes of pragmatic effects is immediately complicated by some of the same problems discussed earlier concerning the definition and

categorical structure of pragmatic effects. If one cannot completely define what a pragmatic effect is or delineate what kinds of pragmatic effects there are, then it is accordingly very difficult to explain what causes them. Thus, to enable a discussion of causality and pragmatic effects, a very broad working definition will be used here:

> Pragmatic effects are bits of meaning that (1) interlocutors (or others who encounter the language), frequently addressees, obtain as well as (2) broader psychological states (e.g., emotions, attitudes, social bonds, etc.) that can arise in interlocutors from *utterance comprehension* but also from *sources beyond both stated meaning and normal nonfigurative and figurative semantic and pragmatic embellishment*. Pragmatic effects, although possibly semantic/pragmatic in nature, may extend beyond semantic/pragmatic meanings. Pragmatic effects also exist in all kinds of language comprehension but are arguably more pronounced in figurative language comprehension given the multitude of complex processes *available* in figurative language interpretation and *patent* in mere exposure to some kinds of figurative (and other) language to deepen, enrich, enhance, or increase the density of meaning expressed and comprehended.

I hasten to add again that these mechanisms are not *special* in the sense that figurative language comprehension is thus fundamentally different from nonfigurative language comprehension. Rather, the mechanisms exist largely but not exclusively in figurative language comprehension as a means of enriching meaning. One can readily find similar mechanisms in nonfigurative language comprehension that also carry enriching potential (e.g., the fixedness and thus objectification or association provided in some nonfigurative expressions, as in the aphorism "Better safe than sorry," or mastery display achieved by impeccably precise, concise, and clear nonfigurative descriptions). I also should add again that pragmatic effects are not deterministic but nonetheless will frequently operate to influence meaning.

One also may invoke a concrete metaphor for pragmatic effects using Vennlike diagrams and terminology from speech act theory. First, imagine a locution in a nonfigurative utterance diagrammed as a circle. A larger circle is then placed around that locution circle to represent the perlocution. This larger circle crudely represents the arrived-at meaning hearers construct from the locution and everything else. If one then considers the same kind of Venn-circle diagram for a figurative utterance, the outside perlocution circle likely would be bigger than the nonfigurative circle. This larger perlocution circle represents the potentially greater quantity, density, or richness of meaning that comes from comprehension of the figure. The

content of that larger circle is essentially what here is being called *figurative pragmatic effects*. As mentioned earlier, there are also, of course, pragmatic effects in nonfigurative comprehension, too. But the present focus has been on what pragmatic effects figurative language accomplishes. Looking a bit at why and how the figurative outer circle is often bigger than the nonfigurative outer circle helps one to consider the definitions of figurative pragmatic effects and their causes. Again, however, some of the figurative pragmatic effect causes also can readily happen in nonfigurative language comprehension as well. The breadth of this definition then allows us to discuss multiple causal mechanisms that operate to produce different pragmatic effects in interlocutors.

Linguistic Causes

First, one can readily talk about causes from linguistic and philosophical comprehension theories such as those discussed in Chapter 2. According to relevance theory, for example, some pragmatic effects are caused by the need to activate positive cognitive effects to satisfy optimal relevance. When a speaker makes a figurative utterance, for instance, its meaning appears inoptimally relevant on the surface. Thus the hearer is authorized to compute or infer additional meaning from the utterance/context up to the point where the effort exerted toward computing that additional meaning is justified by the results obtained.

Similar causes also could be discussed from the literature on inferences in psycholinguistics, also reviewed in Chapter 2. For instance, some inferences are caused by the need to assign pronominal or other referents (coherence inferences) necessary for utterance comprehension. Other inferences (elaborative) are necessary to gain full understanding of a situation described by some utterance (e.g., inferring the consequence [a person's death] of some described situation: "The entire high-rise building collapsed on her during the earthquake").

Still other causes are proposed in current linguistic/philosophical accounts, only briefly mentioned in Chapter 2, that might require some revision given what are described next as potentially *exo*linguistic sources of pragmatic effects in some figures (and nonfigurative language). How these other sources might be incorporated by these linguistic/philosophical accounts is taken up in Chapter 6.

The causes of pragmatic effects discussed next correspond generally to the arguably, at least in part, *extra*linguistic types of pragmatic effects discussed in Chapter 2 (e.g., structural, embodied, psychological, and

sociocultural). But a broader set of causes is presented here, including structural, juxtaposition, metapragmatic, sociocultural, psychological, associative, idiosyncratic, stylistic/register, and embodied.

Structural Causes

Some pragmatic effects may not follow as readily from standing theoretical mechanisms for utterance processing and embellishment. Indeed, a good bit of why figures exist might be wrought from these kinds of pragmatic effects (see Chapter 2). The first set of these additional causes is arguing to be structural (Colston 2007). *The structures themselves of some figures may commonly trigger certain aspects of meaning*. Consider metonymy, for example. A part-for-whole metonymy such as synecdoche, by its very nature, frequently can express derision, especially when applied to people as referents (Colston 2015; Colston & Brooks 2008). The very nature of a reference to something via some reduced label that refers to less than the entirety of that something produces the derision. A number of possible specific mechanisms for this derision are still under investigation. For example, the part-for-whole metonymic structure could reflect a lack of interest on the speaker's part in the referent topic, given that a minimal amount of effort is devoted to making the reference. Or the speaker could be metaphorically representing his or her diminished attitude toward the referent with the minimal reference (i.e., the referent is unimportant [small], so the referential term will correspond accordingly [be small]). Or further still, the metonymy simply could violate the degree of respect expected of in schemas pertaining to people – people are unique, important, special, and accordingly, deserving of more respect than objects or other living things – such that a less-than-entirety reference to a person is almost automatically disrespectful. Despite which of these specific processes is at play, though, the part-for-whole structure of the metonymy itself seems to produce this perceived negative attitude in hearers.

Sarcasm provides another structural example. In typically mentioning positive things while discussing negative things, sarcasm can achieve a contrast effect and, accordingly, make the referent topic look worse than had it been referenced with direct negative commentary (Colston 2002a). Thus the stereotypical positive-about-negative structure of sarcasm itself can produce a perceived increase in negativity on the hearer's part. This perceptual shift resides at a very basic level of psychological functioning, arising from perceptual or even sensory-level processes. To briefly consider an example from perception, if a dark-colored surface is viewed with a bright

background, the perception of the dark surface will shift darker relative to having no background. But this perceptual shift occurs without having to make any judgments about the brightness of the surfaces, their differences, or changes in perception.

Hyperbole, in typically inflating a discrepancy between expectation/desires and reality, also focuses a hearer's attention on that discrepancy so that he or she notices it. A straightforward characteristic of human attention is that, all else held equal, the bigger something is, the more likely it is that it will be noticed. The inflation draws attention. The very structure of hyperbole thus can produce one of its pragmatic effects – highlighting a discrepancy between expectations and reality. This, in turn, can lead to other pragmatic effects, such as surprise expression (Colston & Keller 1998). Such attentional processes are also at a very basic psychological level.

Many figures, indeed, probably most of them, also in their use of implicit incongruity (albeit in many different ways) can achieve humor. The mere structure of figures using relatively strong nonveridicality itself thus can lead to a powerful pragmatic effect, which also can stem from very low-level psychological processes (detection of anomalies) through higher-level cognitive functions (detecting schematic exceptions).

It also should be pointed out that many of these structural meaning mechanisms leveraging from very basic perceptual or even sensory processes (e.g., contrast effects, minimalism, distinctiveness-driven attention, anomaly detection, and others) are often automatic psychological processes that can be found in a wide array of psychological phenomena beyond language. They thus might operate in figurative language processing somewhat outside of or in parallel with language processing per se. Some, more cognitive-level processes that have *become* automated (e.g., some reading processes, schematic violation detection, and lexical chunking) also may gain *some* independence from language comprehension processing proper.

Juxtaposition Causes

Some other pragmatic effects, especially those for metaphor, also may have at their core a structural cause. But this structural component may be worth discussing separately. As introduced briefly in Chapter 2, the structure of typical metaphors involves a discussion of topic A in terms of vehicle B – so the structure of a metaphor is that of a juxtaposition of different domains. Different metaphor theories differ greatly here on specifically what this juxtaposition fundamentally is. But they all nonetheless claim that the juxtaposition greatly enriches and even produces emergent meaning. Conceptual

blends that can arise from linguistic and other metaphors are one such possibility (i.e., blending theory). Another is linguistic metaphors that arguably tap into deep-seated underlying conceptual structures, as argued in conceptual metaphor theory.

The reason juxtaposition is worth noting separately as a cause of pragmatic effects is that it may explain why metaphor is the most prevalent of tropes. Juxtaposition of two entities, as in a metaphor, provides the simplicity to enable frequent, broad, and reasonably infinite usage, with the fruitfulness of enrichment enabled by metaphorical comparison. An interesting analogy from biology is useful – that of reproduction. The simplest possible form of organic copying is asexual, as in cloning. This requires no coordination among parents. But it also provides no genetic variability in the offspring outside of mutation. Sexual reproduction that would involve multiple genetically contributing parents, however, would greatly increase genetic variability. But it would require potentially insurmountable coordination among the multiple parents. Reproduction with just two parents achieves the optimal fit between these two constraints. It maximizes genetic variability while minimizing coordination difficulties. Metaphor, oddly enough, may work this way – a maximal way of enriching meaning (coupling two pseudodisparate domains) with a minimal degree of complexity involved (requiring only two domains, not more). As in the case of reproductive methods in biology, metaphor may have emerged as the dominant form of figurative language because of this careful balance of affordances and constraints.

Metapragmatic Causes

Some pragmatic effects also may have metapragmatic causes. For instance, in the ingratiation process, a speaker/hearer frequently will experience a degree of social bonding via the implicit compliment delivered by the speaker's demonstrated trust that the hearer will comprehend the figure as intended. Mastery demonstration could be another pragmatic effect with a metapragmatic cause, possibly according to the cognitive surplus display hypothesis (Colston & Connelley 2004).

Social Causes

There are two other sets of causes that operate very similarly but are worth discussing separately. One set are social causes, discussed at length in Chapter 2. The work of Albert Katz (2005) and others (Katz, Blasko & Kasmerski 2004; Pexman 2005; Pexman & Olineck 2002;) on metaphors

and irony, for instance, has shown that some people are simply stereotyped in such a way that language produced by them will be taken ironically more often than the same language produced by other people. This source of pragmatic effects also has been shown to play a role at the earliest stages of language processing (Katz 2005).

The role of familiarity between interlocutors (Clark 1996) and how that can produce different pragmatic effects is a second set of social cause of pragmatic effects. For instance, not only may interlocutors who are familiar with each other have more shared knowledge on which to make inferences, but the familiarity or closeness also itself might motivate them to produce more and perhaps different pragmatic effects from a number of sources. Indeed, this closeness of interlocutors can even backfire with respect to attempts at accomplishing pragmatic effects. This is evidenced when people take for granted high levels of shared information such that they might err in assuming more shared information with their interlocutors than is actually the case (see the discussion of the knowledge overlap hypothesis with respect to interlocutor common ground in Chapter 4).

Psychological Causes

A wide array of psychological mechanisms could produce a number of different pragmatic effects. Cognitive dissonance was discussed in Chapter 2 as one example from social psychology. Contrast effects from a number of subfields of psychology also have been discussed a number of times. Other mechanisms from cognitive, social, developmental, and other subfields of psychology also could produce pragmatic effects on their own or in joint functioning with other kinds of causes. Most of these mechanisms will be discussed at length in Chapter 6, so consider here two example effect causes from cognitive and developmental psychology, respectively – human memory and socialization – for illustration.

Human memory is one of the oldest areas of study in cognitive psychology. Its functioning has a direct impact on different pragmatic effects (see Colston [2008] for a review). One particularly poignant example is the effect that schematic structures can have on language processing. It has long been known that human memory is schematic (Bartlett 1932). Mental activation of one small proposition of information can cascade into activation of an entire structure of related information (e.g., scripts and schemas). This spreading activation is automatic, largely beyond conscious control, and fast. Later memory for this initial exposure to information then will often be inaccurate in predictable ways because discerning between externally

encountered informational items versus those that were automatically activated internally by schemas is very difficult.

Language processing that takes place on a given bit of speech (text) never occurs in isolation from this cognitive/schematic activation and its potential memory inaccuracy. What a hearer (reader) was previously doing, both immediately and at more distant durations, can affect the varying availability of propositions and schemas at the time of comprehension. Merely embarking on a comprehension with a particular speaker in a given context also can involve proposition and schematic activation. Those activations can interact with the online language processing, affecting the comprehension products that are created, which, in turn, affect what is remembered, which then can alter the pragmatic effect that arises, change the course of ongoing comprehension, and so on.

Consider the following example: a woman is worrying over problems with her place of work during her Saturday off. Her husband, who had been called to his own job for a special meeting with his boss that morning, sends her the following text:

"I got my notice today. I guess we should celebrate." (3.26)

If the problem at the woman's job was a threat of a pending layoff due to an economic crisis, the woman might be primed to comprehend "notice" to mean a work-termination memo (occasionally referred to as a "notice" in American English). This could lead to an immediate negative emotional reaction (fear – that both members of the couple might end up unemployed). This reaction then could cause an ironic interpretation of the second part of the statement and, in turn, lead to a subsequent additional emotional reaction (anger – at the husband's flippancy in a time of crisis).

If, however, the problem at the woman's job concerned something else, she might comprehend "notice" to mean the possible promotion the husband had perhaps mentioned offhand sometime previously, leading to a nonfigurative comprehension of the latter part of the statement and a happy emotional reaction. Or, had the husband never mentioned a promotion, the woman could interpret "notice" to refer to their young son who had explicitly realized and mentioned that morning that the husband had gotten a haircut the day before – perhaps something the boy had not noticed, and that the couple had discussed briefly the previous evening. In this case, the latter half of the statement could really be taken either way – ironically, but perhaps with different accompanying emotional and other pragmatic effects (a lighthearted pretending that the son's observation is noteworthy), or non-ironically (genuine paternal pride at the son's observational improvement).

Already we can see that what the woman has in mind and remembers can alter how she interprets her husband's comment and the concomitant pragmatic effects. But imagine further that no more conversation takes place between the couple until later in the day when the husband returns home. If the wife had busily done other things since the earlier text, whatever her initial comprehension and pragmatic reaction were, they likely could have faded. On seeing her husband at home, though, she may immediately reexperience the earlier comprehension and its associated pragmatic effects. However, given memory schema activation, *these effects could include content not explicitly said in the initial text nor derived in her initial interpretation* (e.g., that the husband's flippancy is indicative of *why* he got fired – a lack of seriousness; that the husband *will want to buy a new television the family has desired* – as part of the celebration; that the husband is *deeply disappointed with the son's lack of curiosity* – because the husband has discussed this before). This could then affect how the woman comprehends, interprets, and derives pragmatic effects in response to the husband's new remark on returning home:

"He never misses a thing." (3.27)

For instance, if the woman had the ironic version of the third interpretation in mind on her husband's return, including both what was accurately recalled (the husband's noting that the son had noticed the haircut and a mild ironic derision) and what is misrecalled from a memory schema (the husband is deeply disappointed in his son), she might immediately take an ironic comprehension of (3.27). Moreover, even if she is aware that she may have misremembered the level of her husband's disappointment with their son or that it is now an afterthought on her part, she may now take her husband as confirming a strong disappointment attitude with his new sarcastic comment in (3.27). If the conversation were to then continue on that notion, the husband himself might join the view that he is very disappointed in his son, even if that was not his original intention (due to the same schematic information that altered his wife's woman thinking or due to him noticing his repeated sarcastic commentary). For instance, if the wife had replied to (3.27) that something must be done about their son, the husband might now also see the gravity of the son's inattentiveness and agree with his wife's call to action.

Or, instead, imagine that the woman had the first interpretation in mind (her husband lost his job and sarcastically calls for a celebration) when she sees her husband return home. Here she also may have misrecalled or simply now added the idea that his flippancy caused the firing.

This additional component could have been triggered because, in recalling her husband's text, she also remembered other times when he had not been serious. Thus, even if the firing was due to something unrelated (low seniority while the company has financial troubles), the wife's perspective might be to nonetheless blame her husband's frivolity. She might then take (3.27) as a nonfigurative admission of her husband's nonseriousness. However, had she not misremembered or added the frivolity causal component and then interpreted (3.27), she might take it as her husband ironically insulting his boss. Different pragmatic effects then would occur accordingly, and again, the interaction would proceed differently, with the husband joining his wife's interpretations or not. One also could easily propose parallel but differing scenarios based on memory accuracy or error for the wife's remaining possible interpretation (regarding the raise) or for other bits of information that get recalled during the latter part of any of these conversations.

In essence, what we tend to remember, accurately or not, can become what we now know and believe. This can greatly affect how we act, think, comprehend, behave, and speak. This memory influence can directly affect the kinds of pragmatic effects that might occur in a given discourse example. If a wife misremembers some schematic information as part of an earlier conversation (e.g., thinking that her husband is deeply and chronically disappointed in their son rather than being pleased that the son had changed), she might ironically comprehend his later remark and then interpret the pragmatic effect of derision or condemnation. Had she not misremembered the earlier conversation, she might now nonfiguratively interpret the later remark and not experience that pragmatic effect. Her husband might then follow her lead (or not), including his own schematic information as he processes present and recalls past events.

As this example illustrates, comprehension products, interpretive products, context, and pragmatic effects all can interact in very complex ways. They can fade and rearise and interact with schematic knowledge and potentially inaccurate memory content to influence the resulting conscious experiences of all interlocutors. Moreover, this schematic nature of memory is but one of potentially dozens of related effects concerning the malleability, alterability, inaccuracy, fallibility, and many other effects of human memory. These effects have been thoroughly documented from well over a century of empirical research in cognitive psychology and related disciplines. These effects could have important ramifications for theories of language use and comprehension. Indeed, considerations of memory alone

might require a major rethinking of how we explain language comprehension and pragmatic effects (Colston 2007).

Research in developmental psychology also demonstrates how psychological phenomena can produce or affect pragmatic effects. Consider the limited but growing research on children's use and comprehension of hyperbole. Perhaps somewhat different from other kinds of figurative language, production of hyperbole begins very early. It also takes on adult production characteristics right away. Authentic hyperbolic utterances from children at approximately seven years (range 2.6–10) were found to be measurably indistinguishable from hyperbole produced by adults (Colston 2007; see also Pexman et al. 2009 and Recchia et al. 2010). Indeed, the productions from the younger half of the children in the Colston (2007) study (younger than seven years) also were essentially indistinguishable from those of the older children (older than six years).

Yet children's comprehension of hyperbole seems to lag relative to production. Winner (1988), for example, found that hyperbole comprehension in children improved from age six through eight years but, although being better than understatement, was worse than comprehension of verbal irony (see also Demorest et al. 1983). It is unclear whether the measured imperfection in hyperbole comprehension at very early ages is an artifact of item authenticity and laboratory tasks with compromised contextual support – hyperbole comprehension may occur earlier with more subtle and realistic measures. But the issue is probably moot for present purposes – that hyperbole *production* develops relatively earlier than other figurative production is revealing for a consideration of pragmatic effect causes.

The explanation offered by Colston (2007) for the adultlike hyperbole production in children is the remarkable alignment between what hyperbole's standard form (an inflation of a reality/preference discrepancy) pragmatically accomplishes for a speaker (bringing attention to that discrepancy) and a predominant experience by young children stemming from socialization – their desire to complain about constraint. This demonstrates developmentally the structural cause of pragmatic effects discussed previously. A strongly desired expression is perfectly encapsulated by a particular figurative form – children do not like that reality frequently differs from expectations/preferences/desires in their everyday experiences (they want to run, yell, etc. but are told to walk, use indoor voices, etc.), and children are emotionally unable to contain that frustration. Thus children seek to bring the discrepancy to people's attention, and hyperbole perfectly suits the job (e.g., "I always have to …" and "You never let me …").

Associative Causes

Another set of causes may be argued to be associative. Some figures are simply or schematically associated with things such that use of those figures can conjure those things and accordingly produce some pragmatic effects. One example would be a speaker using a figure widely associated by an audience with a particular context such that meaning from that context is activated in parallel with the processing of the figure and then can influence the language processing. A character from the 1990's American television program *Saturday Night Live*, the "Church Lady," for example, frequently used the figurative comment "Isn't that special" when confronted with risqué or taboo material. The comment is euphemistic and ironic at core, but it is also widely associated with (1) the comedian who portrayed that character, Dana Carvey, (2) the program *Saturday Night Live*, (3) the kind of audience that watches the show, and a host of other information. All these associations can produce pragmatic effects, for instance, that a speaker using that phrase (at least in the 1990s) keeps current with a hip, young, American cultural scene.

As a more current example, consider contemporary verbal constructions stemming from texting communication that make use of diminutivization, apocope, morphological back clipping and other kinds of clipping, elision, meiosis, reduction, syncope, reduplication, and many other similar techniques to render abbreviated terms, as well as spoken or orally spelled versions of common texting abbreviations:

totes	for	"totally,"
adorbs	for	"adorable,"
peeps	for	"people,"
selfie	for	"self-photograph,"
cray cray	for	"crazy,"
samesies	for	"me too,"
ridic	for	"ridiculous,"
YOLO	for	"you only live once,"
OMG	for	"oh my God,"
LMAO	for	"laughing my ass off,"
BFF	for	"best friends forever," and
WTF	for	"what the fuck." (3.28)

Speakers can use these to trigger associations with youth culture and cutting-edge electronic social media, which has emerged as a recent popular phenomenon for purportedly highlighting generational differences (Withey 2013).

Idiosyncratic Causes

There are also pragmatic effects with very particularized causes that come from only one figure. As discussed in Chapter 2, tautologies are a good example. Tautologies produce a complex pragmatic effect of potentially maximizing the search for optimal relevance. This process, accompanied with cognitive dissonance, can make the figure/speaker seem incredibly deep and insightful or can make the figure miss its mark completely and make the speaker appear nonsensical or even flakey.

Stylistic/Register Causes

There may even be some pragmatic effects that arise from stylistic or register causes. Akin to Deborah Tannen's work on conversational styles but applied particularly to figurative language, some figures may be associated with different registers or styles of talk and produce pragmatic effects accordingly. Consider a personal example. One evening, I was at a bar/restaurant with a few academic colleagues. One person was well known to me; the others were only acquaintances. The conversation, albeit proceeding steadily, was nonetheless a bit stiff at times because (1) the interlocutors were not all well acquainted, (2) most of the interlocutors tended toward being formal, and (3) as often occurs among university colleagues from different disciplines, a moderate degree of professional wariness and competition was at play. At one point, the person well known to me said something about having bought a number of linen shirts to wear in Florida, where he was to be traveling for his daughter's upcoming wedding. When he finished, in part to intentionally loosen up the conversation, I loudly offered up, "They wrinkle like a motherfucker."

This relatively crude, figurative profanity, used during a relatively formal group conversation, shocked the other interlocutors. But it did so in a positive sense and, as planned, greatly reduced much of the existing tension, allowing everyone to talk much more freely from that point forward. Thus a certain informal register was employed in the use of figurative language that had an effect of showing an acceptance of that style and producing the desired pragmatic effect of relaxing the other interlocutors – catalyzing further conversation.

Embodied Causes

Still other pragmatic effects stem from embodied causes, also discussed in Chapter 2. Some pragmatic effects might arise from deeply embodied

aspects of language, such as running simulations of past experiences, typically sensory or motor based, when hearing metaphors that use words as vehicles that tap into those experiences (Bergen 2012). For example, when hearing the metaphor

"The economy's problems are just snowballing," (3.29)

a person might briefly run simulations of his or her past embodied experiences with "snowballing" – that the ball of snow grew quickly, that it got much heavier as it grew, that it was harder to change direction the bigger it got, and so on – in such a way as to greatly enrich the meaning conveyed in the use of the metaphor.

TIME COURSE OF PRAGMATIC EFFECTS

One last issue concerns when and whether these different causes occur in the time course of comprehension. Chapter 5 discusses this issue in terms of constraints on the limits of pragmatic effects. However, as pertains to the sets of different effects and their causes discussed here, some predictable differences are likely. Some of the causes should produce effects as soon as possible online and perhaps even somewhat independent of language processing per se. For instance, the derision conveyed by asyndeton or verbal irony is highly transparent. It is also built into the structure of the figures and likely would happen almost immediately during comprehension. Other causes of pragmatic effects are more interpretive, would likely take place later than online in the time course of comprehension, and would even be optional and tenuous. Finally, there is a layered nature to some pragmatic effects such that a relatively unsophisticated or unmotivated hearer likely would get them in some cursory fashion, but a more experienced/sophisticated/motivated hearer would acquire them much more deeply. Akin to the layers of humor in cartoons or other material, for instance, a child or adolescent might get the subjective positive feeling from a good metaphor but nothing further. An adult, however, might experience that feeling along with a recognition of mastery display, social engineering, and so on involved in the speaker's performance.

MIDPOINT CONCLUSIONS

This and the preceding two chapters discussed the issues surrounding the identity, diversity, and underlying causes of a wide variety of pragmatic effects in figurative language use. We have seen that pragmatic effects can

and do stem from figurative and contextually based inferences of different sorts that occur as part of language processing. But we have also seen how some pragmatic effects could arise from processes parallel to, in interaction with, and possibility distinct from language processing per se (Katz 2005; Pexman 2008).

The next question to be addressed is how, then, might speakers/writers actually marshal these processes when speaking/writing to intentionally produce pragmatic effects in speakers. Or how might pragmatic effects arise on their own as an emergent product of conversation without necessarily being intended by speakers? Related to this question is the current extent of pragmatic effects and whether that extent is somehow limited from expanding. If expansion is not currently limited, then what might the future hold for new kinds of pragmatic effects and figures to produce them?

4

How Is Figurative Language Used? Three Kinds of Answers

When asking the question, "How is figurative language used?" several ways to approach the answer are available. One way is to look separately at broad versus narrow explanations. For instance, broadly, one could list the *set of things that figurative language is used for*. More narrowly, one could address specifically *how figurative language accomplishes each of those things*, perhaps by listing the ingredients and processes that have to be present or must take place for successful accomplishment. To use a brief analogue example, consider asking the same question about food (i.e., "How is food used?"). One could first list what food is used *for* (e.g., for physiological fuel, for ritual or celebration, or for a gift, enticement, pleasure, or payment). One could next detail *how a person accomplishes each of those things with food* (e.g., to use food for physiological fuel, a person first selects organic ingredients that are digestible or easily made so or that have certain caloric or nutritional qualities. One then prepares the ingredients in ways to increase their digestiblity or palatability – peeling, heating, soaking. Then one combines the ingredients in certain ways while doing certain things [gently stir in X while simmering Y], etc.).

A third way to answer the question "How is X used?" is more subtle. Any question about the *use* of something typically puts focus on the agent(s) and object(s) of that use. For instance, when asking "How is a hammer used?" whether seeking broad answers, in the sense outlined earlier (e.g., for driving nails, for pulling nails, or for scratching one's back), or narrow ones (e.g., to use a hammer to drive nails, grab the hammer handle near the blunt end, point the hammer head toward the nail head, and swing firmly aiming to hit the nail head squarely with the hammer head), the question typically directs the hearer toward the general act of or specific steps in using the agent to manipulate the object – using a hammer to drive nails or baking a cake to celebrate a person's birthday. One usually does not think, however,

about how hammers, cakes, and so on are used *for the user(s)*. However, in thinking about how something such as figurative language (the agent) is used, we sometimes overlook the typical inherent involvement of at least *two* human parties (only one of whom, the addressee, is the object). For instance, we regularly talk about using figurative language to, say, enhance comprehension in an addressee, but we do not often address what figurative language does for speakers. Attending to the speaker, or user, thus is also important because we need to account for effects of the usage on them. Thus we can ask the question, "How is figurative language used?" separately for accomplishments in an addressee/hearer as well as in the speaker(s). As we'll see, relatively little attention has been given to the latter.

This chapter will address how figurative language is used across these different kinds of questions and answers. The focus in the first broad-versus-narrow-answer approach will be on the role common ground (Clark 1996) plays in figurative language use. This discussion of common ground addresses how considerations of human memory, begun in Chapter 3, and other mainstream cognitive processes may require a rethinking of common ground in language comprehension and use for *both* figurative and overall language. The issues of appropriateness, aptness, and indirectness per se also will be considered in comparing common ground in figurative *versus* nonfigurative language. Beyond issues on common ground, this section also will briefly consider the packaging of figurative language in it use as pertains to the question of how do you use figurative language to accomplish a pragmatic effect. For the subtler effects-for-user question, how pragmatic effects seem oriented toward the speaker rather than addressees or other hearers will be discussed briefly.

COMMON GROUND IN FIGURATIVE LANGUAGE USE

Answering the broad sense of the question "How is figurative language used?" (i.e., what is figurative language used *for*) would really just repeat the discussion in Chapters 2 and 3 about what a pragmatic effect essentially *is* and what the different pragmatic effects *are*. The general answer to that sense of the question was that pragmatic effects (additional meaning[s] arising in interlocutors *from* utterance comprehension; see Chapter 3 for the lengthier working definition) are the set of additional meanings that figurative language seems to exist *for* (i.e., metaphor exists for the purpose of [among others] enhancing or enriching meaning, verbal irony exists for [also among others] effectively expressing negativity, pointing out

discrepancies, etc.). The focus in this chapter thus will be on the narrower answer pertaining to *how a person goes about accomplishing* a particular pragmatic effect with a given type of figurative language.

One major goal of this discussion is thus to make a recipe – provide a list of what ingredients seem to be needed and what processes are required – to achieve particular pragmatic effects with figurative language. The ingredients for a given pragmatic effect would first seem to vary across figurative forms. Verbal irony, for instance, would require something like (1) a situation where events may not be explicitly as expected, (2) an imaginable, expected, preferred, or desired set of alternative events, (3) an utterance that somehow states, elicits, reminds of, or refers to that alternative set, and (4) a contrast being created between the actual situation and the alternative set of events to highlight the anomalousness and perhaps negativity of what actually ensued. Or, for metaphor, one needs (1) a relatively abstract target domain, (2) a relatively concrete source domain with some kind of potential alignment (e.g., structural) with the target domain, and (3) a linguistic construction that juxtaposes the source and target domains.

These lists of ingredients, of course, also will differ depending on the different hypotheses being considered for the particular figures (e.g., one could also add, for verbal irony, an ironic environment [Utsumi 2000] and pretense [Clark & Gerrig 1984] or, for metaphor, an emergent blended domain of the target and source [Coulson & Oakley 2000]). Indeed, developing and debating these sets of ingredients arguably has been the bulk of the work accomplished by empirical research looking at the uses of different kinds of figurative language. Moreover, study, documentation, and debate about the ingredients of pragmatic effect accomplishment constitute one of the two major competing approaches to explaining figurative language cognition overall – that its explanation will require a myriad of smaller explanations for different kinds of figures (i.e., different recipes with different ingredients for different figures) versus it being explained by one holistic account (Gibbs & Colston 2012).

As for the set of processes required for accomplishing a pragmatic effect, outside the multiple accounts discussed in Chapter 2 for pragmatic effect derivation in general (e.g., implicatures, inferences, positive cognitive effects, and embodied simulations), two major issues remain. The first is the extent to which a speaker of a figure can select his or her ingredients and embark on the concomitant processes *without consideration of what is currently in the mind of the addressee/hearer.* Can a given speaker, for instance, simply put together the usual ingredients in the usual ways to trigger the typical processes and get a pragmatic effect to happen in an addressee or

hearer? For instance, can a speaker linguistically juxtapose an appropriate source and target domain (and fulfill all the other ingredients and processes typical for metaphor) and achieve meaning enhancement in another person? Or is something additional needed, something that in detail might vary from one figurative use instance to another but that in principle must always occur? This brings us finally to the current debate about the necessity of common-ground considerations in figurative language production and comprehension.

A Brief Summary of the Debate

The debate over the necessity of common-ground considerations for successful language use and comprehension has been extended in a limited fashion to the production and comprehension of figurative language (Barr & Keysar 2005; Colston 2005). Among other figures, the discussion over common ground's necessity has been applied to production and comprehension of contextual expressions, metaphor, verbal irony, idioms, indirect requests, and patterns in discourse that use different figures. For now, though, let's first briefly consider the role of common ground in language production and comprehension *in general*.

The ongoing debate concerning the classic notion of common ground and its role in language production and comprehension arose between traditional cognitive-philosophical pragmatic theory on one side versus sociocultural and interactional empirical evidence on the other – the latter coming from cognitive psychology, linguistic pragmatics, and intercultural communication (Kecskes & Mey 2008). The classic view is that common-ground consideration is *necessary* for language comprehension and use to be effective (Clark 1996). Speakers must compose their language carefully, bearing interlocutor common ground in mind. Listeners, in turn, are required to consult common ground in their comprehension of that language.

Some research, however, has questioned common ground's necessity for comprehension and production. Multiple studies have provided empirical evidence that speakers are more egocentric in language production than common ground's traditional view would allow and that hearers do not regularly or consistently consider common ground in comprehension (Barr & Keysar 2005).

The traditional view arose from a philosophical approach seeking to explicate how interlocutors efficiently construct shared cognitive experiences through language. For any utterance to be effective, it must work

within the framework of what interlocutors know. A speaker's utterance is wasteful, for example, if it provides information a hearer already has or if it provides information not anchored to a hearer's current knowledge. Speakers thus behave as a shepherd of sorts toward their addressees/hearers, attempting to move those addressees from their current state of knowledge toward one the speaker has and wishes to share with those addressees. Such a process requires establishing and monitoring what an addressee knows and does not know, adjusting that representation as the hearer acquires more knowledge (or loses it), and optimizing utterances to fit a hearer's knowledge and provide reasonable portions of new information. For comprehenders, the process also requires monitoring what they know their interlocutor knows they know (one definition of common ground). An addressee thus can discern what a speaker intends to communicate, for instance, by winnowing out interpretations that do not adhere to his or her common ground with the speaker.

A great deal of empirical evidence has supported this functional process of common-ground construction, monitoring, and use for both production and comprehension. Speakers and hearers use sources of common ground such as community membership (e.g., a speaker can rely on an addressee to know that his question "Did I tell you we saw the president?" refers to the president of the United States because the interlocutors are both citizens of the United States) and physical presence (e.g., "Do you smell that?") to create and comprehend their productions (Clark 1996; Clark & Marshall 1981; Clark, Schreuder & Buttruck 1983; Greene et al. 1994; Sanders, Wu & Bonito 2013).

The more recent work challenging this view, however, has shown that speakers often use referential terms that are rooted in their own knowledge, for instance, rather than knowledge contained in their common ground with an interlocutor (Barr 1999; Horton & Keysar 1996; Keysar et al. 1998, 2000). For example, a speaker might ask for the "Phillips screwdriver," and a hearer might think that this means some other screwdriver or ask for clarification when only one screwdriver is uniquely defined by the interlocutors' common ground (Barr & Keysar 2005). Speakers also will use abbreviated referential terms developed with a previous interlocutor when the current addressee is actually someone else who has no knowledge of those abbreviations (Barr 1999; Barr & Keysar 2002). Indeed, people seem generally poor at knowing what others know and at gauging the effectiveness of their own communications. Speakers who first learn opaque phrase meanings, for example, overestimate likelihoods that

different people also know those meanings (Keyser & Bly 1995). Speakers additionally overestimate the clarity and effectiveness of their own utterances (Keysar & Henly 2002).

These latter studies do not contest the principle that something like common ground exists as an important construct to constrain production and corral comprehension. However, they do question common ground's *necessity* given that instances of egocentric thinking and language can be readily obtained (Barr & Keysar 2005). This approach also contests that greater information overlap always increases communication effectiveness (Wu & Keysar 2007) and that common-ground usage must occur at initial production and early in comprehension rather than as a latter corrective process (Epley et al. 2004). The Wu and Keysar (2007) study, for instance, demonstrated that the more information interlocutors share, the more they will use their own knowledge in making references. This *knowledge overlap hypothesis* helps communication when the interlocutors are talking about referents they both know, but it also causes speakers to make references with names only they know, leading to confusion for the addressee and forcing the interlocutors to repair. It is as if interlocutors who share a lot of knowledge tone down their common-ground monitoring, assuming as a rule of thumb that their high information overlap will afford effective communication. Interlocutors with low information overlap, however, pay stricter attention to common ground because they realize that vigilance is necessary for successful communication.

Figurative Language and Common Ground

Now consider other work specifically addressing the role common ground would play in figurative language. Traditional accounts of metaphor and verbal irony, for instance, have argued for varieties of shared cognitive structures to enable production and comprehension among interlocutors (e.g., embodied schematic structures for source domains in metaphors and social norms in verbal irony). Other work has addressed metonymy, hyperbole, idioms, and other figures.

Metaphor

Much of the research addressing common ground in figurative language comes from traditional accounts of varieties of figures. This research did not focus on the construct of common ground per se but nonetheless worked with something very similar. Most of the array of metaphor theories, for

instance, claim at least implicitly that preexisting or emergent shared cognitive structures underlie successful use and comprehension. Consider just five examples.

The *conceptual metaphor* view hinges on conceptual mappings between source and target domains that are predominantly shared among interlocutors. These mappings typically link abstract concepts (e.g., politics) to more concrete concepts, the latter involving embodied schemas or other knowledge interlocutors necessarily share (e.g., sleeping), as in "Politics is such a snooze" (Lakoff & Johnson 1980; Lakoff & Turner 1989).

Other theories argue for shared meaning that emerges from source–target domain couplings, as in "She is such a pill." Here the reverberation between the linked domains produces an emergent blend where the target's interpretation contains characteristics held by neither of the domains, person and pill, by themselves (Fauconnier & Turner 1998, 2002; Oakley & Coulson 2008). For instance, the highly concentrated nature of pills (e.g., a broad and long-lasting physiological effect arises from a compact concentration of chemical substances) can combine with the target's personality (e.g., her cleverness) to produce an emergent blended meaning shared by the interlocutors (e.g., the target's cleverness allows her to make very subtle comments that break through social conventions and reveal broad truths in novel ways).

Class-inclusion accounts argue that metaphors are comprehensible because interlocutors share knowledge about categorical structures and memberships. For instance, a hearer can understand "Her career is a toboggan ride" because he shares the speaker's knowledge that the target (her career) is a member of a category of things for which the vehicle (toboggan ride) is a prototypical member (Glucksberg & Keysar 1990).

Metaphor accounts that incorporate embodiment and simulated bodily actions in metaphor comprehension (Gibbs 2006a, b; Glenberg & Kashack 2002; Ritchie 2008) invoke common ground via the inherent similarity embodied simulations would have between interlocutors. A speaker using the metaphor "We slid right through that orientation" thus can count on an interlocutor's successful comprehension because both speaker and interlocutor share embodied schematic structures such as sensory and motor programs for the source domain. By both having had physical experiences of "sliding" (e.g., quick, lithe, maneuverable motion through obstacles with little resistance) and corroborative sensory experiences (e.g., seeing or hearing "sliding"), speakers can count on their and their interlocutor's internal simulations of those experiences having enough consistency to enable coherence of meaning when the metaphor is used.

Ritchie's *connectivity model* of metaphor interpretation (2004a, b, c) puts common ground at the very center of metaphor comprehension in emphasizing the importance of conversational contexts active in short-term or working memory. That context includes sociocognitive representations of common ground along with the usual semantic and schematic metaphorical information. Different instances of comprehension of a root metaphor are thus tightly linked to and will be affected by what the conversers know they know. For example, a hearer newly interpreting the metaphor "My job is a jail" would reach different interpretations depending on the immediate conversational common ground between the interlocutors. Had the speaker of the metaphor recently mentioned the *entrapping* or *confining* nature of her occupation (e.g., she is overqualified for all occupations except one, which is available in only one place), the hearer would reach one interpretation. Had the speaker just spoken of the *punitive* nature of her job, though, (e.g., she'd been relegated to the job to pay for some property she damaged), a different interpretation would be reached.

Work by Pexman, Ferretti, and Katz (2000) provides a bridge between common ground's functioning in metaphor and irony, demonstrating that common-ground components can influence whether a particular figurative utterance is taken as metaphor or as irony (e.g., uttering "My job is a soft pillow" to metaphorically mean that the job is easy or to ironically mean that it is difficult). A previous study (Katz & Pexman 1997) had demonstrated that three factors enable prediction of how such ambiguous figures are interpreted – the nature (occupation) of the speaker, whether the statement and context are counterfactual, and the root metaphor's familiarity. The Pexman, Ferretti, and Katz (2000) study demonstrated in an online moving-window task that these factors make their influence early in processing. Most interesting for our present purposes is that each of these components can be considered to be a form of interlocutor common ground. Nature (occupation) of the speaker requires interlocutors' sharing knowledge, perhaps from community co-membership, about the stereotypical nature of people in different occupations (e.g., comedians are sarcastic; clergypersons are not). Counterfactuality could arise from physical presence or shared preceding discourse context (e.g., the speaker is sweating under the obvious physical difficulty of her occupation or she had just said that she'd completed a grueling eighteen-hour shift). Metaphorical familiarity can arise from several sources depending on which metaphor theory one espouses, but they all inherently depend on common ground among interlocutors for successful comprehension (see earlier).

Verbal Irony

The verbal irony literature also consistently invokes common ground in both traditional and more recent accounts. Early models based on echoic mention or echoic reminder, for example, explicitly invoke conceptual structures shared by interlocutors to enable comprehension (Kreuz & Glucksberg 1989; Sperber & Wilson 1981, 1986). That interlocutors would share knowledge based on recent co-experience (e.g., the interlocutors having both heard a sportscaster claim that an athletic team's upcoming game will be their "defining moment") or community co-membership (e.g., sharing the social norm that television comedies should be entertaining) to enable comprehension of sarcastic comments such as "A moment 'well-defined' " at the team's routing or "One of their best" about an unfunny episode. The pretense account also explicitly calls for interlocutors to *mutually* recognize a portrayal of a viewpoint not actually held by a speaker or performer typically for the sake of belittling that attributed viewpoint (Clark & Gerrig 1984).

Other irony accounts involve interactions among multiple interpretations of ironic remarks (e.g., frame-shifting accounts derived from blending theory [Coulson 2001], graded salience [Giora 2003], and contrast [Colston 2000b, 2002a]). These and similar accounts invoke common ground through the means by which interlocutors share or progress through those interpretations. Graded salience, for instance, argues for an activation of a salient meaning and then computation of the difference between that meaning and the context to arrive at the intended ironic meaning. Since interlocutors presumably share the particular context and mechanisms for deriving salient meaning (e.g., conventionality, familiarity, frequency, and prototypicality), as well as means of computing differences between them, comprehension is successful (Giora et al. 2005). Frame shifts also use common ground not only through interlocutors coestablishing the conceptual frame for an initial portion of the ironic discourse but also in their coprogression through an alteration on that frame to achieve the ironic interpretation (Ritchie 2005):

> Consider, for example, a young mother who has been kept awake most of the night by a crying infant and hands the baby to her husband with a request, "Please take the little bundle of joy for a few minutes while I fix a cup of coffee." Here "bundle of joy" activates the culturally approved frame both to comment ironically on it (and undermine it) and to comment on the current situation by contrasting it with the ideal (culturally approved) frame [p. 291]. (4.1)

If interlocutors do not both achieve this conceptual anchoring and shift, then comprehension fails (similar frame shifts are discussed later for figures

that appear in discourse patterns). Finally, interlocutors can rely on shared perceptual functioning as a form of common ground according to the contrast process. Here a speaker can rely on her interlocutor to comprehend the intended negativity of an ironic comment by perceiving the contrast between the semantically positive utterance content and the typically negative referent (Colston 2002a; Colston & O'Brien 2000a, b).

Indeed, reviews of the range of verbal irony accounts argue that verbal irony necessarily requires common ground through interlocutors' implicit recognition of violations in their shared expectations (Colston & Gibbs 2007; Kumon-Nakamura, Glucksberg & Brown 1995). This claim was verified empirically in that even in cases where at the time of a speaker's sarcastic utterance interlocutors do *not* share a belief that an expectation was violated, hearer's will explicitly *infer* that a particular expectation was perceived as violated by the speaker (Colston 2000b).

Other empirical work has substantiated some claims about common ground's role in verbal irony comprehension, but results are inconsistent. Kreuz et al. (1999), for example, specifically manipulated the level of common ground shared by interlocutors using verbal irony in short written vignettes. Ratings by readers of the speaker's comments revealed that although the intensity of perceived irony was not affected by common ground, rated appropriateness of the comments increased with common ground. Common ground affects verbal irony processing as well (Kreuz & Link 2002), with ironic statements presented as if said to high-common-ground interlocutors being read more quickly than statements read to low-common-ground interlocutors. In the latter study, though, the statements spoken to interlocutors with high common ground were rated as more ironic than statements directed at hearers with low common ground. High common ground among interlocutors thus appears to aid processing and seems more appropriate if interlocutors are using irony, but its effect on perceived levels of irony is unclear.

Keysar (1994) had participants read comments only they knew were intended as sarcastic by the speakers. The participants were instructed to adopt the perspective of other naive addressees, however, and judge whether those addressees would interpret the sarcasm or not. Participants overall were more likely to attribute ironic interpretations on the addressees' parts more than should have occurred had participants been fully using common ground in these assessments. It thus appears that people cannot always suppress their privileged knowledge concerning ironic intent by a speaker when trying to assess the interpretations of other hearers.

Gibbs (2000) conducted an observational study of friends' authentic conversations and analyzed the resulting content for frequencies and types of verbal irony. Notable in this work for our present consideration of common ground was a finding that 8 percent of all conversational turns contained one of five subtypes of irony (jocularity – 50 percent [of the 8 percent]; sarcasm – 28 percent; hyperbole – 12 percent; rhetorical question – 8 percent; and understatement – 2 percent). Conversational topics also were predominantly human concerns, particularly something immediate and often involving persons or events known to interlocutors. Interestingly, between a quarter and a third of different ironic comments received another ironic comment as a response, a clustering result not previously *quantitatively* demonstrated in the verbal irony literature. These findings clearly demonstrate some of the functions of common ground in friends' use of irony in conversations. Irony is frequently used among friends – nearly one in ten conversational turns involves irony. The conversational topics involve content intimate to conversers. Irony also often cascades through conversations, demonstrating an emergent common ground involving conversational shared co-presence, as if interlocutors collectively recognize that "We're all doing irony now" (Gibbs 2000).

Pexman and Zvaigzne (2004) specifically manipulated common ground through relationship solidarity (solidary = close, liking, and mutually supportive) among interlocutors described in short written vignettes. The study measured participants' perceptions of degree of irony in interlocutors' comments as well as multiple pragmatic effects typically performed by verbal irony. Results revealed that common ground in the form of relationship solidarity had no effect on perception of irony per se – irony was seen as equally strong across type of interlocutor relationship. However, irony among high-solidarity interlocutors was perceived as better at performing relevant pragmatic effects – irony was funnier, more teasing, and less status changing in high-solidarity interlocutors. This study thus also demonstrates a clear function of common ground in irony comprehension – catalyzing particular pragmatic effects.

Different uses of common ground for achieving verbal irony across languages were demonstrated by Okamoto (2002), who investigated ironic remarks that used the system of honorifics in Japanese. Similar to what might occur in American English, positive comments made about negative topics were seen as ironic regardless of the status of the honorific construction. Negative comments made about negative topics that included an honorific also were seen as ironic (somewhat analogous to saying to a child in American English, "Sir, your paper has a lot of mistakes"). However,

unlike what might occur in American English, positive comments made about negative situations were more ironic when their honorific structure did not fit the interlocutors (e.g., an adult saying to a child who performed poorly on the piano, "Ma'am, you are really good at the piano" versus "You are really good at the piano"). The stricter honorific structure in Japanese allows for subtle gradations of irony that are less easily achieved given the relatively simple honorific system in American English.[1]

Accounts attempting to encompass verbal and situational irony also include common ground in their explanations. For instance, Utsumi's *implicit display theory of irony* (2000) contains three tenets that intimately assume common ground among interlocutors or coperceivers of situational irony. A speaker can only use verbal irony successfully and witnesses can only perceive situational irony when a situation displays an "ironic environment" – or an ironic contradiction present in the situation. Speakers of verbal irony accordingly must "display" that ironic environment in their ironic utterances, which all interlocutors must then mutually recognize, for successful ironic comprehension. Interlocutors and coperceivers additionally share a conceptual structure of irony based on prototypes (verbal or situational), with some ironic instances mutually viewed as more (or less) ironic than others.

Hyperbole

This figure, even in its relative simplicity, involves common ground via shared expectations or desires concerning magnitudes and frequencies in the world. A speaker uttering "I wanted to die" or "I never get to do what I want," for example, in the context of a boring evening or frustration about parental restrictions is understood because interlocutors share expectations/desires about levels of negativity and freedom in relevant situations. The friend hearing "I wanted to die" knows that the speaker is inflating the discrepancy between reasonable expectations/desires and reality about dating (e.g., the evening should have been enjoyable, but her date droned endlessly about his drywall contamination). The hearer thus can correctly comprehend the comment as a complaint about the date rather than a genuine wish for death. The parent hearing "I never get to do what I want" recognizes the comment's inflation of the discrepancy between desires/expectations and reality (reasonable personal freedom versus strict parental restrictions). The parent thus can comprehend the utterance as a gripe about restrictions rather than an accurate observation about personal freedom's nonexistence. One telling fact about hyperbole's use of common ground is that hyperbole productions appear very early in children and

have very similar structure to hyperbole productions by adults. Knowledge about magnitudes and frequencies and expectations/desires with respect to those magnitudes are acquired early in children's cognitive development, affording common ground with adults and thus enabling early hyperbole use (Colston 2007).

Contextual Expressions

Contextual expressions comprise a class of utterances with a variety of structures (e.g., noun-noun combinations and denominal verbs) whose meanings depend completely on discourse contexts, for example, "Their senses depend entirely on the time, place, and circumstances in which they are uttered" (Clark 1983, p. 300). As such, contextual expressions are among the most dependent on common ground of all the types of figurative language.

Gerrig (1989) demonstrated this dependency by creating stories with conventional or innovative contextual expressions as endings. For instance, one version of a story would discuss a film company making a movie containing a dream sequence. In the dream, a Neanderthal man standing by a cave is supposed to change into a door man standing by a luxury hotel. The director has not yet hired the male actor to appear in the sequence, though, so he says, "We really ought to get the cave man" or "We really ought to get the door man." These two utterances are the conventional endings. For the innovative endings, the same utterances are used at the end of a story about a university's fine arts department seeking to hire a new faculty member. The department currently has no one who teaches about caves or doors, but it has funding for only one position. A professor in the department then says one the preceding utterances.

To evaluate two processing models, the study presented stories and utterances such as these to participants, whose reading times for the utterances were measured. One model that did not incorporate an influence of common ground on early processing (the *error-recovery model*) predicts that any differences obtained between the conventional utterances (due to lexical frequency differences between "cave" and "door," for instance) also should be found in the innovative utterances. This model claims that a contextual expression is interpreted by first comprehending its conventional meaning and then replacing that meaning with one that better fits the context (including common ground). Readers thus would take longer to comprehend contextual expressions used innovatively (as in the fine arts examples earlier), and any differences between different conventional expressions would transfer to innovative uses of those same utterances and also be observed there.

The other model, however, incorporates common ground into the early stages of processing of contextual expressions. This model (the *concurrent-processing model*) makes the same prediction for conventionally used contextual expressions (e.g., lexical frequency differences might allow "door" to be processed slightly faster than "cave"), but it predicts no concurrent differences in contextual expressions used innovatively. In those cases, common ground (coming from the previous discourse context) is used early in processing to comprehend the innovative utterances and thus erases any processing differences that would occur in conventional uses of those utterances. So long as the contextual support is equivalent for the different innovative utterances, then processing times of those utterances should be similar.

The results supported the concurrent processing model. Using the preceding examples, conventional uses of "We really ought to get the cave/door man" as in the film story showed slight reading-time differences corresponding to lexical-frequency inequalities (e.g., more frequently used lexical items are processed faster). In innovative uses of the utterances, though, as in the fine arts department story, these differences disappear or are even reversed. It thus appears that common ground is necessary to comprehend contextual expressions and that its influence takes place very early in processing. Indeed, more recent work has confirmed this conclusion with eye-movement paradigms (Filik 2008).

Idioms

Idioms also have been argued to greatly depend on common ground for their successful use and comprehension. Given the opacity of meanings of many idioms, successful comprehension would seem to depend on hearers having learned those meanings in some cultural context. Use of such idioms thus would require consideration of community (cultural) co-membership.

One way in which common ground in idiom comprehension seems to run counter to this notion, though, concerns idiomatic transparency. It seems that peoples' judgments of idiom transparency are partly affected by those people having learned and used the idiomatic meanings. This, in turn, can affect how likely they'll think it is that an addressee will comprehend a particular idiom. All of this operates outside the level of common ground between interlocutors.

Keysar and Bly (1995), for instance, taught participants new meanings for unfamiliar idioms and then asked the participants to determine which meaning other people might select for those idioms when the meanings

were not known by those other people. The participants thought that the meanings they had learned were relatively transparent and guessed that novices also would see this transparency and select the meanings participants had learned more often than other meanings. Meanings that participants had not learned for the idioms also were judged as less transparent by the participants. Those judgments also increased the more participants used the learned meanings for the idioms. These effects also held no matter what meanings researchers taught the participants for the idioms (e.g., positive or negative meanings).

The explanation offered for these effects stems from how people learn idiomatic meaning (Keysar & Bly 1999; see also Malt & Eiter 2004). According to the researchers, when people learn an idiomatic meaning, they construct correspondences between that meaning and the idiom's linguistic constituents. These correspondences then shroud other possible correspondences that could align with other possible meanings of the idioms such that the learned meaning seems more transparent to learners. The learner cannot help but to then believe that other people would observe the same stipulated transparency given the strength of the meaning–linguistic constituent links in the learner's representation of the idiom.

Multiple other accounts, however, argue that idiomatic use and comprehension can rely on components of common ground other than cultural co-membership. To the extent that idioms make use of preexisting conceptual metaphorical mappings, hyperbolic inflations between expectations/desires and reality, or other figurative processes (as in "He blew his stack" [*anger* is *contained heated liquid*] or "It's always darkest before the dawn" [*bad* is *dark*]), their comprehension can rely on these processes being in the common ground of same-language speakers.

Indirect Requests

A great deal of older and more recent work also has investigated common ground's role in the production and comprehension of other figures such as indirect requests. A standout finding in this work is that speakers use common ground to craft their constructions of indirect requests typically to demonstrate consideration of the addressee's needs in granting those requests. A speaker is more likely to phrase an indirect question such as "Do you have a sweater I could borrow?" for instance, if the primary obstacle facing an addressee in granting that request is their not possessing an extra sweater. This consideration ultimately serves the purpose of enabling the addressee and demonstrating politeness on the speaker's part (Gibbs 1981a, b, 1983, 1986a, b, 1987; Gibbs & Mueller 1988).[2]

Common Ground in Discourse Patterns

Some discourse *patterns* that can use figurative language also might require common ground in an unusual way. Although figurativeness is not explicitly required for these patterns, polysemous terms, double/multiple entendres, and figurative and other flexible forms work well here. Consider the subcase of adversarial humor labeled *trumping* (Veale, Feyaerts & Brone 2006). Here an initial speaker will utter a phrase whose comprehension requires the hearer to recognize and adopt a particular semantic or schematic frame. The hearer then revisits but alters that frame somehow in a rebuttal, providing a send-up of the original meaning typically with great comic effect. These alterations can range from phonetic through pragmatic, but they must leverage from the initial utterance's frame. Consider first an example from an office setting that, although containing a tautology, is not greatly figurative. A young male business executive is wearing an unusual-looking overcoat that a more senior executive belittles. The young executive's reply is the initial phrase:

YE: "Hey, this was my grandfather's overcoat."
SP: "It looks it." (4.2)

Here the young executive is invoking a positive view on the schema of *practicing a tradition*, seen in his case via the honoring of a senior family member by wearing his clothing. The senior partner maintains the exemplar of that schema in the rebuttal, but he also invokes a negative view on the practice of wearing an elder family member's clothing by implying that the coat looks old, worn, or out of fashion.

This shifting within a frame is readily handled by figurative language. Observe the use of metaphor when the opening turn and rebuttal use different entailments of the same source domain:

HUSBAND (TO WIFE): "Why do you always have to be such a wet blanket?"
WIFE (TO HUSBAND): "You get that way when the person next to you is a drip." (4.3)

Here the husband invokes the conceptual metaphor *bad* is *wet* in calling his wife a wet blanket. The wife keeps but cleverly alters that source domain's structure to entail that the wetness is coming from another source (her husband). Her rebuttal also is enhanced through the double entendre linking the metaphorical-referential and nonfigurative forms of "a drip."

Trumping is particularly interesting when more than two turns can be achieved by the interlocutors with repeated revisitations and subtle alterations to the evolving utterance frame(s). The point concerning common ground is that interlocutors must recognize, at least implicitly, a previous turn's frame and use an alteration of it in their rebuttal. If retorts do not use the previous frame, the exchange is not nearly as humorous (Veale, Feyaerts & Brone 2006). Common ground can be invoked in these exchanges additionally through speakers embedding private keys with overhearers or other audience members, as well as their interlocutor. These can enhance the dueling process of subverting the previous retort's framework to embarrass or insult the addressee or in a complex ironic banter form of camaraderie. Speakers with particularly enhanced skill at trumping also can work with the common ground shared among several hearers to achieve complexly different interpretations in different individuals. A speaker could, for example, insult the interlocutor without his or her knowing but allow two different overhearers to see the insult, with each reaching a different interpretation based on a separate private key.

Writers of television comedy are particularly adept at creating these series of trumping volleys, albeit perhaps as caricature. Consider the following opening scene to series 2, episode 9 of the American syndicated situation comedy *The Big Bang Theory* (Lorre et al. 2008). The characters are Penny, an uneducated waitress/aspiring actress working in Los Angeles, and Sheldon, her neighbor, who is a stereotypically nerdy, genius young Ph.D. theoretical physicist who lives with Leonard, another highly intelligent, nerdy young professor who, at the time that this scene takes place in the series, had once briefly dated Penny:

Scene: The lobby of Sheldon and Penny's apartment building.

SHELDON:	"Penny, hello."
PENNY:	"Hey, Sheldon."
SHELDON:	"What is shaking?"
PENNY:	"I'm sorry?"
SHELDON:	"It's colloquial, a conversation opener. So, do you find the weather satisfying? Are you currently sharing in the triumph of some local sports team?"
PENNY:	"What's wrong with you? You're freaking me out."
SHELDON:	"I'm striking up a casual conversation with you. S'u'up?"
PENNY:	"Please don't do that."
SHELDON:	All right, But I'm given to understand that when you have something awkward to discuss with someone, it's more palatable to preface it with banal chit chat."

PENNY: "So, this wasn't the awkward part?"
SHELDON: <pause> "No."
PENNY: "Oh, all right. S'u'up?"
SHELDON: "Oh, good, I used that right. Anyway, you're aware that Leonard has entered into a new romantic relationship which includes a sexual component?"
PENNY: "Okay, feeling the awkward now."
SHELDON: "Her name is Dr. Stephanie Barnett, and she is a highly distinguished surgical resident at Freemont Memorial."
PENNY: "Yeah, Leonard told me."
SHELDON: "Good. What he may have left out is how important this relationship is to me."
PENNY: "To you?"
SHELDON: "Yes, see, of the handful of women Leonard's been involved with, she's the only one I have ever found tolerable."
PENNY: "Well, what about me?"
SHELDON: <pause> "The statement stands for itself."
PENNY: "Well, aren't you sweet."
SHELDON: "Anyway, should you have any interaction with her, it would be most helpful that she not see you as a sexual rival."
PENNY: "Yeah, I think she's pretty safe."
SHELDON: "You say that now, but consider the following scenario: you're sitting in your apartment, it's late, you're alone, your hypothalamus is swimming in a soup of estrogen and progesterone, and suddenly even Leonard seems like a viable sexual candidate or a, uh, hookup as it's referred to by today's urban youth."
PENNY: "Really?"
SHELDON: "Yes. Now, should that happen, I would ask you to find some way to suppress your libido."
PENNY: "I could think about you."
SHELDON: "Fine, whatever works."
PENNY: "Always nice talking to you, Sheldon."
SHELDON: "Uh, peace out!" (4.4)

Among the many instances of trumping here, consider the opening segment up to Penny's comment, "Okay, feeling the awkward now." After his repeated awkward attempts at colloquial greeting, Sheldon mentions the tactic of using small talk to initiate and soften a discussion of a difficult topic. Penny trumps this approach by ironically noting that Sheldon's greeting itself was awkward. Sheldon misses her irony and in his mind trumps her retort by restating the *obvious* fact that he has only forewarned her of an upcoming uncomfortable topic but has not broached the awkwardness

yet. Penny then trumps his missing the irony again by ironically inviting him to continue using the same vernacular with which Sheldon opened the conversation. Sheldon again misses her irony, indicating that he is pleased that he used that opening correctly, and then broaches the awkward topic – his roommate Leonard's new sexual relationship, taking place shortly after Leonard had dated Penny. Penny once again trumps Sheldon's belief that he has successfully prepared her for an uncomfortable topic by echoing his use of the word "awkward [now]" to describe this issue, and renders the issue particularly "awkward" given that she had earlier ironically indicated the conversation up to that point had already been awkward.

This example nicely demonstrates the role that common ground plays in trumping. For the characters Penny and Sheldon to achieve these staggered jokes in their discourse, they both must repeatedly return to the core shared schematic frame of approaching awkward topics with softening small talk prepares the interlocutors for the awkwardness in their comments and yet alter some aspect of it each time (e.g., Penny's early indication that Sheldon's preparatory small talk was the awkward part; Sheldon's response indicating his [mistaken] belief that Penny is in error about that). But again, caricature discourses in fictional comedic venues do not necessarily capture the reality of how people use common ground in authentic conversations. The general issue over the necessity of common-ground consultation for using or comprehending figurative (or all) language remains unsettled. Moreover, other issues concerning how common ground functions in use and comprehension arise from considerations from mainstream cognitive psychology. Indeed, the importance of realizing common ground as an aspect of human memory may force us to rework our thinking about common ground.

A NEW "NEW LOOK AT COMMON GROUND"

Returning now to the general construct of common ground and its role in overall language function, not just as applied to figurative language, a number of issues have arisen concerning the relationship between common ground and some mainstream cognitive psychology phenomena. Outside of the challenge posed by the growing empirical work (e.g., Keysar 2007) that shows theoretically inordinate levels of egocentrism in speakers' production and comprehension, Colston (2008), for instance, raised several cognitively based concerns for the traditional theoretical conceptualization of common ground. These concerns may require some retheorizing of common-ground functioning as it applies to figurative language at least and possible all forms of language as well.

Memory

One concern involves the recognition that common ground is essentially a form of human memory (Horton & Gerrig 2005). An enormous body of empirical work extending back to early research in cognitive psychology has demonstrated that human memory is highly dynamic, malleable, vulnerable to pre- and postevent information, self-serving, schematically structured, and essentially unreliable. Regardless of the extent to which common ground may be consulted for production/comprehension, this nature of human memory brings into question how accurate common ground would be whenever it *is* consulted.

That common ground may behave similarly to cognitive dissonance was also considered to be an issue for language use and comprehension based on common-ground consultation (Colston 2008). Rather than being a preexisting reference tool, consulted by speakers and hearers for production and comprehension, common ground instead may be what interlocutors come to *believe* they mutually know given that they have completed an exchange of meaning. The *illusion* of common ground thus may function to enable communication perhaps more than the standard notion of common ground itself. This phenomenon may partly underlie the common experience of negotiators or other discussants misbelieving that they have approached agreement with one another at some point only to realize that they have understood things differently. They confuse the effort put forth toward working out agreement with genuine alignment on issues with the other party.

Related to this is the possibility of individual or partnered discovery of common ground that takes place as a result of a conversation. Interlocutors, either individually or together, may derive their shared beliefs about their common-ground content dynamically during the process of conversation rather than building it up explicitly. Consider, for example, a new member of a basketball team sitting on the bench alongside a veteran of the team during a game. The rookie had recently been promoted from a lower-skill league, where players were not expected to have high performance on a particular skill, that of making three-point shots. One of their teammates in the game then misses a three-pointer, which the rookie finds completely normal, but then the veteran on the bench says offhand and sarcastically to the rookie, "Nice shot." Here the speaker is not necessarily considering the common ground with the hearer in this production. The rookie, by virtue of coming from a lower league, may not share the expectation that players at this level should reliably make three-point shots. The rookie

also may not consult the specific local common ground with the speaker to comprehend the sarcastic utterance. Prior to the utterance, the rookie did not know the level of performance that was expected. Yet, *through* the process of the comprehension, the rookie learns of the expectation and likely then shares it that players should successfully complete three-point shots in this league.

The malleability of human memory *cum* common ground also allows for an enormous influence of social factors on what interlocutors believe they mutually know. A socially dominant speaker, for instance, can dictate part of the content of some interlocutors' common ground. To demonstrate with another reference from popular culture, consider a scene from the widely viewed first episode (chronologically) of the *Star Wars* films (Kurtz & Lucas 1977). The Ben Kenobi character is being driven into a city on the desert planet Tatooine by Luke Skywalker – two robots ("droids") accompany them. The city is teeming with other people, aliens of all sorts, and other droids. Some soldiers are looking for Luke's droids and approach Luke and Ben as they drive through the city to question them. To quietly escape the soldiers, Ben uses an "old mind trick" from his training as a Jedi Knight. He looks directly at the questioning soldier, says a series of comments with a wave of his hand ("These aren't the droids you're looking for," "move along," etc.), causing the soldier to repeat each comment in turn (e.g, "These aren't the droids *we're* looking for") as if this is what the soldier thought all along.

This example admittedly depicts a science-fiction form of language-mind control, but something very much like it occurs in normal, everyday real human talk and interaction. People continually attempt to ascertain the accepted narrative about situations around them and will readily adopt one from a particular speaker if that narrative suits the adopter. They may absorb the narrative because they admire its speaker and seek to align themselves with him or her. They may not have a fully formed schematic representation of the situation at hand, so they absorb one provided for them. They may view the speaker as a kind of expert about the situation if only because the speaker was quick to speak up about it. Of course, exceptions to this process exist, and on many occasions perceivers will forcefully hold to a particular view and resist frameworks from other speakers. Nonetheless, people commonly also alter their viewpoints about some situation, often without knowing, in order to adopt one from someone they are influenced by socially. Indeed, such social factors influence all levels of language processing, not just common-ground formation and alteration, perhaps more so than is commonly accepted (Colston & Katz 2005).

Availability

Other general cognitive psychological phenomena also may force a reworking of our notion of common ground and its functioning. The work of Robert Bjork and his colleagues has demonstrated, for instance, that information readily and easily assimilated into a person's current knowledge structure may not, perhaps counterintuitively, be retained by that person for a long time (Bjork 1994; Schmidt & Bjork 1992). Information assimilated with greater difficulty, however, may have longer staying power. Thus, somewhat oddly, information that *conflicts* with a person's common ground (e.g., a speaker firmly believes that he and an addressee both know they were both in attendance at a long-ago party, only to hear the strong counterbelief from that addressee that she was not there) may remain grounded later compared with information that *confirms* a person's common-ground content (e.g., had the addressee agreed about the co-presence). This can produce the odd situation where a belief that is objectively true may be *less* likely retained in a person's memory than a false belief.

Compare the following two situations: first, the woman in the preceding example was at a party in the past, the man believes this and says so, and the woman agrees. Later, the man believes that he and the woman mutually know that she was at the party, a true belief. Alternatively, the woman was at the party, the man believes this and says so, but the woman disagrees. Later, the man believes that he and the woman mutually know that she was *not* at the party, a false belief. The conflicting information in the latter case is more likely to be retained in the man's common-ground memory than the confirmatory information in the first case, even though the latter information is incorrect. Of course, it is also possible that a person's *initial* incorrect belief that gets contradicted/corrected by an addressee would be more likely to be remembered. The fact remains, though, that in some situations inaccurate information is more likely to be retained. This runs counter to the idea that common ground is a generally reliable system of maintaining accurate information about what interlocutors mutually know they know.

Automaticity

A number of other psychological phenomena not covered by Colston (2008) also may apply to a rethinking of common ground in figurative language. Consider automaticity and cognition. A great number of cognitive tasks initially require intense conscious attention on a performer's part for successful completion. Over time, though, these tasks become automated such

that they no longer require conscious attentional resources. They still get performed by the brain/body/environment system, but this work is largely out of the performer's conscious awareness. Tasks such as reading, driving automobiles, and many kinds of motor work, among many others, demonstrate this automation. Once a skill has become automated, a performer can still switch to more conscious control if some unexpected challenge is encountered in the task (e.g., a complex driving maneuver is suddenly required). Otherwise, however, functioning remains automatic. One additional characteristic of automation is that, on occasion, automatic processing can dominate when more conscious input is warranted such that overall performance goes awry. Consider the experience of having "read" an entire page in a book only to notice that little comprehension took place. Or note the common experience of starting toward a driving destination (or even while walking) only to deviate along some highly prescribed route (e.g., intending to drive to a grocery but instead driving to work because of the high frequency of taking the latter route).

Common-ground functioning in production and comprehension, both in its argued traditional role and in how it seems to get bypassed when speakers/hearers act egocentrically, might be largely explained by automaticity in cognition. It is true that other, indeed many other, reasons exist for why a speaker would talk or comprehend egocentrically (see Colston 2008). But one way remains in which the process of common ground becoming semiautomatic nicely matches egocentric talk phenomena. Consider that automaticity, once developed for a skill, usually has three general functioning modes: (1) a performer operates in automatic mode with low-level cognitive functions proceeding automatically and no task-relevant functions being required of higher-level cognitive operations – performance is successful; (2) the performer must invoke a conscious takeover of automatic functions to meet a challenge or tackle something unusual and does so – performance is also successful; and (3) automatic processes are engaged, but task-relevant higher cognitive demands are suddenly required from the task. The performer has his or her conscious higher functions directed toward something unrelated to the task, however, such that performance goes awry.

Common-ground functioning and dysfunctioning could readily map onto these three modes. When interlocutors, either familiars or strangers, are conversing, they automatically follow *general* common-ground parameters enough so as to communicate with effective meaning exchange – analogous to mode 1. Here interlocutors may fail to use common ground perfectly, but their adherence to common ground is effective enough for

the purposes at hand, so the conversation proceeds smoothly. Second, a situation demands a return to more careful conscious common-ground consultation for effective meaning exchange (e.g., strangers are motivated to increase familiarity, interlocutors are seeking to impress one another or an audience, a person is seeking to [re]integrate herself into a social group, or the stakes of misunderstanding or inaccuracy are high), and the interlocutors rise to the occasion and strictly follow common ground for production/comprehension, and again the conversation is successful. This is analogous to the conscious takeover in mode 2. Finally, instances where interlocutors behave egocentrically and do not strictly follow common ground, perhaps enough to require repair or even to ruin the communication, are analogous to mode 3. To illustrate this mode, consider a situation where a speaker has thought extensively and deeply about some topic. This speaker then converses with an addressee about that topic. The speaker may greatly overestimate common ground with that addressee on that topic because the speaker erroneously believes that information he had considered was also considered by the addressee. Here the automated process of audience design does not give way to conscious consideration of common ground such that the speaker assumes too much, and the conversation goes awry.

Individual Differences

Another cognitive phenomenon that could affect how we conceptualize common ground concerns individual differences in cognitive skills. Most cognitive skills vary somewhat across performers and situations. Some people are excellent at problem solving, for instance, whereas others are poor at it. A given person also might solve problems successfully in one instance but not in another. Rather than thinking of common-ground consideration for production and comprehension as a theoretical necessity, it might be better construed as a cognitive skill that varies. Some speakers/hearers use it very well. Others use it less well. Some speakers use it well at some times and poorly at others. Surely, some common-ground consideration at a broad level is always needed – speakers cannot switch to a language they know their interlocutor cannot speak and expect understanding. But context and other overdetermined factors may allow understanding to happen even if common ground is not strictly used in a conversation (Keysar 2008). Other means to reach comprehension such as postponing comprehension are also available (see Colston 2008). Some modes of talk also do not always require full comprehension or accurate derivation of a speaker's intended meaning in the first place, as in verbal play (Colston 2008).

Style

The latter point raises another potential issue in how to conceptualize common ground. Conversational style and its match between interlocutors also vary considerably among individuals (Tannen 1984, 2005). Beyond production/comprehension skills and task demands (see later), some speakers simply may tend at times to talk/comprehend stylistically without making extensive use of common ground. For personal preference or other reasons, a speaker may just like to utter what is on his or her mind, for example, without always considering the common ground with an addressee/hearer/audience. Speakers also may have varying cognitive or social needs that affect how much they use common ground. For instance, the extent to which a speaker/writer is in need of cognitive closure has been shown to affect audience design (Richter & Kruglanski 1999). Interlocutors also would benefit often if their current conversational styles with respect to common ground match each other. If one partner is expecting high relevance and extensive common-ground adherence in a speaker, who, in turn, is speaking with a more sporadic or looser consultation of common ground, communication would suffer. But if the hearer can loosen his common-ground-fit expectancies or the speaker can tighten hers, then the conversation likely would improve.

Common Ground and Use

Lastly, consider the particular task demands required of conversations and their effect on common ground. What is a given conversation in a particular situation being used *for*? Indeed, this usage variable may underlie some of the empirical and theoretical differences found in the prior research on common ground. For tasks that require speakers to strictly anchor references in their common ground, for instance, success likely would depend on the interlocutors successfully doing that. If two chefs in a busy restaurant, for instance, must quickly establish joint referents, you might hear

> "Hand me that fat ladle with the red handle fast. I need to sauce this plate" (4.5)

and then later

> "Fat ladle, now!" (4.6)

and they will likely make extensive use of common ground for production and comprehension. But if a task places less pressure on establishing

grounded referent terms, then interlocutors would likely behave accordingly. Imagine the same two chefs relaxing and conversing after their shift. The first chef asks the brief question, "Tired?" The second chef simply sighs in return. The first chef could interpret this response to mean "Yes." Or the response could mean that the other chef does not want to answer – perhaps the chefs' common ground contains the knowledge that the answering chef does not like personal inquiries. This situation does not put enormous pressure on the questioning chef, however, to use common ground to determine the intended meaning of the sigh response (nor even to craft his initial question). Yes, there is a way that a misinterpretation could cause problems. For example, were the questioning chef to next say, "Why don't you just take it easy then. I'll finish cleaning up" and the other chef to reply angrily, "I didn't say I was tired. I just hate when you ask me that." But several other scenarios could unfold without difficulty. The questioning chef could take either or both interpretations (the meanings are not mutually incompatible) and then simply do nothing. Such a response is compatible with whatever the sighing speaker intended. But returning to the instance of the high-pressure situation, there is much less flexibility. Only one interpretation is possible in (4.6) as a condensed version of (4.5), and the situation demands that the hearer get it correct and respond accordingly.

The theoretical debate concerning the role that common ground plays in overall language use and comprehension is ongoing. How common ground appears involved in figurative language, as well as the cognitive and social psychological phenomena that affect common-ground functioning, should be included in further debate on this issue. Further discussion needs to also address possible differences in how common ground might be used *between* figurative versus nonfigurative language. Potential differences arising from the appropriateness, aptness, and indirectness per se of figurative language are thus useful to consider.

COMMON GROUND IN FIGURATIVE VERSUS NONFIGURATIVE LANGUAGE

It is useful to ask whether the role common ground plays in production and comprehension is different when one considers figurative as opposed to nonfigurative language. One argument might claim that no fundamental differences should exist. To the extent that figurative language does not require special, unique, or somehow different processes for its production/comprehension compared with nonfigurative language, then the way common ground is used in figurative language also should not differ. It is true

that *across all language forms* the nature of common-ground usage is still arguably open to question – is its consideration necessary for all production/comprehension, under what circumstances and for what reasons are speakers unduly egocentric, how can communication occur in the presence of egocentric speech, and so on. These inquiries, however, would not, according to this argument, be particularly illuminated by a consideration of figurative language.

Another argument, though, holds that at least some forms of figurative language entail greater, different, or unique combinations of requirements on common ground compared with nonfigurative language. Indeed, common ground among interlocutors has been argued to motivate why people use and understand figurative language so readily (Gibbs 1993, 1994). Moreover, figurativeness, or perhaps indirectness itself, might impose a particular requirement on common ground that is found less often in more direct language. Some individual figures also might impose their own idiosyncratic demands on common ground for successful communication.

Let's consider this question first across different common-ground aspects. For some basic considerations of common ground, the situation *would* likely be the same in less- and more-figurative language, as in lexical knowledge. A speaker would be more successful in language production, for instance, if he or she considered whether an addressee is familiar with a potentially unusual lexical item. Moreover, this success would hold whether the utterance is more or less figurative. Consider a speaker using the following direct or metaphorical utterances with a fluent or novice English user:

DIRECT: "I'm not using that container; it's a spittoon." (4.7)
METAPHORICAL: "I'm not going in that place; it's a spittoon." (4.8)

Although clearly these different usages of "spittoon" convey different meanings, at core an addressee needs to know what a spittoon is to maximally comprehend these meanings. Certainly contextual support, syntax, prosodic and metalinguistic cues, and so on could enable some degree of comprehension of both utterances (although likely differently in the two cases). But without basic lexical knowledge concerning spittoons, a crucial piece of meaning remains missing. It thus behooves speakers to consider their lexical common ground with addressees in figurative and nonfigurative talk.

Other aspects of common ground, however, may show some differences between nonfigurative and figurative and/or indirect language. Consider three different aspects of common ground that can arise in any normal utterance production/comprehension: appropriateness, aptness, and indirectness. These aspects would make use of established sources of common

ground (e.g., physical co-presence or community co-membership) but combine them in different ways to address different concerns.

Appropriateness

For appropriateness, interlocutors might consider their personalities, past shared experiences, the current situation, and other factors in determining whether and how to produce, as well as how to comprehend, some utterance. Certainly speakers might intentionally or unintentionally violate appropriateness for many reasons. Speakers also may make errors or have limited skills in weighing the relevant factors. In general, though, consideration of these factors would result in production and comprehension of utterances that attempt maximal appropriateness. For example, a situation such as a funeral might render inappropriate certain kinds of language such as profanity, but a speaker still might use profanity with a hearer in that setting, perhaps privately, if the interlocutors share the belief that profanity just between them would not be offensive.

To the extent that some forms of figurative language can accomplish a wide variety of pragmatic effects concisely through their structure and via other means – perhaps more so than many kinds of nonfigurative language (although certainly not all) – a speaker would need to weigh the appropriateness of those figurative pragmatic effects. Thus appropriateness considerations might be somewhat more complex or weighty for some kinds of figurative language (as well as for some nonfigurative language) in particular situations. For example, given the rich sociopragmatic effects of sarcastic verbal irony (to enhance or dilute condemnation, to invoke humor, or to ingratiate), it might warrant a speaker to consider the appropriateness of all these functions (and their potential interactions) in a given setting. Comparable less-figurative language may pose less of an appropriateness puzzle (recall the Pexman and Zvaigzne [2004] study that demonstrated how interlocutors in high-common-ground relationships can use irony to enhance the performance of certain pragmatic effects).

Consider, for instance, a speaker saying one of the following at a wake:

FIGURATIVE: "Well, this sure is a peach of a day." (4.9)
NONFIGURATIVE: "Well, this sure is a sad day." (4.10)

Given sarcastic verbal irony's ability to occasionally enhance negativity expression (among other functions), a speaker may need to consider the appropriateness of enhancing negativity as opposed to simply making note of it in a situation where people may already feel very negatively

(Averbeck & Hample 2008). Certainly, nonfigurative language also can express negativity, as well as perform many of the other pragmatic effects of figurative language, but the strength and, to some extent, near automaticity[3] of pragmatic effect performance by some figures, perhaps due to their structure, may warrant a greater consideration of the appropriateness of using those figures relative to using comparative nonfigurative language.

To the extent that some figurative forms may place high expectations on interlocutors' participation in the figurative discourse, common-ground consultation vis-à-vis appropriateness also would seem to be more necessary. Discourses where addressees are not intimate or familiar with the speaker may especially raise this issue. This greater presser to consider common ground in production may be a general issue for indirect language per se (see later), but it particularly applies to appropriateness.

Figurative language that may have a quality of triteness due to its fixedness (e.g., some idioms, proverbs, and other fixed figurative expressions) also may enhance the need for common-ground consideration with respect to appropriateness. Some nonfigurative examples face this issue as well (e.g., "Well, I'll be"), but it seems more pertinent to figurative language.

Alternatively, some functions of figurative language may lead to a lesser consideration of common ground with respect to appropriateness. To the extent that figurative language is useful for cathartically capturing and illuminating a speaker's attitudes or emotions about something, a relaxed consideration of common ground may be beneficial. If a speaker is too absorbed in attempting to speak appropriately for some audience, the catharsis enabled by figurative language production may be compromised.

The creative nature of many kinds of figurative language also may be helped in other ways by circumvention of common ground. A speaker may simply Hail Mary a novel metaphor, for instance, risking that the addressee will not understand or perhaps experimenting to see if comprehension occurs, with little consideration of common ground. To the extent that the goal of the speaker is pure creativity, common-ground adherence in some ways could be restrictive.

Aptness

Aptness refers to the internal structure of an utterance and how well that structure either accomplishes the speaker's intended meaning or fits an external referent (Katz 1982; Malgady & Johnson 1980; Ortony et al. 1985). Characteristics of utterances such as length, complexity, clarity, specificity,

coherence, structure, fit with referents, and relevance all can vary significantly. Utterances that optimize these characteristics would be most apt.

Some metaphorical utterances in particular may require a deep consultation of sources of common ground, such as potentially complex, analogical, or other detailed structural, conceptual mappings between source and target domains. For example, if a speaker is trying to explain to an audience her selection of an unpopular solution to a problem (e.g., a boss tells her employees that they will *all* have to take a moderate across-the-board pay cut rather than her imposing a vertical cut that would eliminate some employees entirely but leave others unscathed), an utterance that more closely fits the speaker's belief and/or reality would be more apt than a vague or ambiguous one. Consider the following nonfigurative and figurative utterances that vary in aptness in this context (note that the speaker of these utterances believes the objective reality that in this situation an across-the-board moderate pay cut is the *minimally negative* and *fairest* of all possible solutions):

NONFIGURATIVE: "This solution minimizes the pay reduction, and no one loses his or her job." (4.11)
NONFIGURATIVE: "This solution helps the employees." (4.12)
FIGURATIVE: "This solution minimizes blood loss, and no one dies." (4.13)
FIGURATIVE: "This solution heals the wounded." (4.14)

For the nonfigurative utterances, the greater precision/reduced ambiguity in (4.11) improves aptness relative to (4.12). The same holds for the figurative utterances, where the more precise mapping in (4.13) (evenly distributing a bad thing and preventing the worst of that bad thing versus simply improving an overall bad thing) improves aptness relative to (4.14). But in the metaphor utterances, the improved aptness also requires careful consideration of the source-domain selection. Other possible source domains, although still differing according to the precision of the mapping between former and latter tokens, might overall be less apt. Consider

FIGURATIVE: "This solution minimizes the lifting, and no one gets exhausted." (4.15)
FIGURATIVE: "This solution reduces the load." (4.16)

Blood loss and death more aptly fit the target domain of income loss and unemployment given that both blood and money are substances that fuel livelihood. Effort expenditure (e.g., lifting) might *roughly* apply to income loss and unemployment given that in some contexts effort expenditure is also a bad thing. But the mapping is much less precise. Moreover, effort

expenditure involves action *on the part of the actors* rather than being something that happens *to them*. The latter aligns better with externally imposed job reductions. There also may be more contamination in (4.15) given that effort expenditure in some contexts is considered a good thing (i.e., hard work pays dividends) relative to (4.13) (blood loss is less easily rendered as positive).

Other kinds of metaphors, however, might reduce the reliance on common ground for the sake of a metaphor's aptness. Metaphors, even novel ones, that make use of widely used conceptual metaphorical mappings between source and target domains probably can be relied on to achieve their meaning in normal adult addressees/hearers. So long as the metaphors additionally do not rely on complex mapping structures or specialized instantiations of the source domains, then strict consultation of common ground for familiarity likely would not be necessary.

Other figures also may omit or reduce common-ground consultation and still achieve aptness. Interlocutors using these forms can rely on many social norms and environmental expectancies when speaking figuratively. Norms and expectancies constitute a deep form of community co-membership. Speakers thus could likely trust any other normal adult human who has lived a social life and had sensory experiences to have those as part of his or her cognitive repertoire. Active, conscious common-ground scrutiny thus would not likely be necessary for these forms. A speaker, for example, could readily leverage off the social norm that friends should be helpful ("You're such a good friend" – verbal irony) or that magnitudes should be at certain levels ("It's broiling in this house" – hyperbole) in some figurative forms. Speakers should not have to consider whether their interlocutor(s) have this knowledge.

Some individual figures, however, also would likely require *enhanced* common-ground consideration by virtue of their reliance on shared cultural knowledge (e.g., contextual expressions) or their fixedness and basis in a culture (e.g., some idioms and proverbs). For example, interlocutors must share popular cultural knowledge to understand a speaker who, in response to an addressee's disbelief that a supposedly devoted family man actually had numerous extramarital affairs, says, "Yeah, he's a total Tiger Woods" (consider also "Yeah, he's a total JFK"). This contextual expression is not comprehensible as intended unless the hearer knows that the famous American golfer Tiger Woods (or Jack Kennedy), who had a popular reputation for being a devoted husband and father, actually had multiple extramarital sexual relationships.

Finally, some ironic expressions that make use of particularized references for comprehension (e.g., via echoing, reminding, or through some

pretense-based sarcastic or other figurative commentary) also may require heightened common-ground consideration. Aptness of these instances almost by definition requires that the speaker know that the hearer knows the identity of the referent-portrayed speaker or quoted/attributed comment.

Indirectness

Common-ground consideration also may be stronger for some figurative forms by mere virtue of figurative language's indirectness. All language comprehension requires cognitive work on the hearer's part. For figurative and other kinds of indirect language, some of that work might entail a complex shared metarepresentation that the interlocutors are performing figurative communication (Carter 2004; Gibbs & Colston 2002; Goatly 1997). Speakers may be reluctant to expect nonintimate hearers to collaborate in this metarepresentation. And those nonintimate hearers may feel indignant if such an expectation is made of them by a stranger. Thus a common-ground consideration also may be warranted on the use of indirect language per se in some cases. This is to accommodate the level of intimacy or familiarity between the interlocutors. The same, of course, would hold for nonfigurative language that also somehow overexpects collaboration on interlocutors' parts (e.g., revelation of private or intimate information, cheeky requests, or overly personal inquiries).

Related to whether a speaker should use indirectness/figurativeness at all with an interlocutor, based on their intimacy and familiarity, is the issue of how wry or obvious the speaker should be about that indirectness/figurativeness. Again, nonfigurative language does not escape this concern. To the extent that delivery affects comprehensibility in figurative language (i.e., as in using clearly portrayed intentions when using echoic verbal irony), then hearer/addressee characteristics, as well as the nature of the interlocutor relationship that might affect that comprehensibility, are warranted for consideration.

Of course, all these lesser and greater potential uses of common ground by figurative language are by no means deterministic. Under some of the circumstances discussed here, however, the figurativeness of language nonetheless may alter interlocutors' interaction with common ground in predictable ways.

THE FUTURE OF COMMON GROUND

Clearly, the issues surrounding common ground's role in comprehension/production of language in general require further work. However, we'll

briefly consider here how that work pertaining to only figurative language or in a comparison between more and less figurative language might proceed going forward.

To begin, the validity and extents of any differences in common-ground functioning in figurative versus nonfigurative language, including the potential ones discussed earlier, require empirical investigation. It might behoove scholars and researchers to also explore other potential differences, as well as to incorporate any validated findings into the ongoing debate about speakers' egocentrism versus traditionally theorized common-ground utilization.

Some effort also might be directed at potentially different common-ground functioning across individual figurative types or families. Consider how common-ground consideration might differ between relatively fixed versus unfixed figurative forms (e.g., some idioms and proverbs compared with metaphors and verbal irony). Common-ground functioning also might differ across levels of decomposability in figures (e.g., idioms), between deeply embodied versus more laterally structured conceptual metaphors (e.g., *anger* is *heat* versus *time* is *money*), and between attitudinally rich versus relatively semantic figures (e.g., verbal irony and hyperbole versus some metaphors), among many other possibilities.

Finally, some of the "new" issues raised earlier about common ground in general might have specific import when applied to figurative language. For instance, Colston (2008) noted a number of memory phenomena that require consideration given the recognition that common ground is essentially a kind of human memory with all its inherent fallibilities. One such phenomenon is distinctiveness. All else being equal, something that is somehow distinctive is more likely to be remembered compared with something more mundane. Information that is distinctive to some interlocutors is thus more likely to be encoded into their common ground versus other information. Distinctive things thus can outweigh other possibly more important things in affecting those interlocutors' later productions and comprehension given that distinctive things will be more prevalent in the interlocutors' common ground. A highly distinctive novel metaphor, for instance, could greatly affect subsequent conversation and comprehension compared with a different mundane statement that might actually carry more importance. Consider how speakers in persuasive professions might use this tool for their purposes:

A prosecuting attorney in a courtroom cross-examination:
"Okay, your fingerprints weren't on the weapon, (4.17a)

but that hardly matters to the victim who was a (4.17b)
blood geyser after you left the apartment" (4.17c)

A salesperson at a Toyota dealership:
"Yes, we had that recent recall, (4.18a)
but when it really comes to safety, (4.18b)
all other cars are hamburgers to a Rottweiler." (4.18c)

The vivid metaphors in these statements (4.17c and 4.18c) are more likely to get and remain grounded than the mundane preceding statements (4.17a and 4.18a) that partially obviate the metaphors. It is thus possible that hearers of these comments will later more likely believe that the accused person is guilty and that Toyotas are safer than other cars when neither actually may be true.

PACKAGING FIGURATIVE LANGUAGE

Returning now to the recipe metaphor for the narrow question about how figurative language is used – what are the *ingredients* and *processes* required for accomplishing pragmatic effects – we have seen that different kinds of figurative language require different *ingredients* (e.g., metaphor needs A, B, and C versus irony, which requires X, Y, and Z), as do different explanations of one figure (e.g., different ingredients are needed for pretense versus echo in verbal irony). We have also seen that different *processes* might apply across different figures and their explanations (see Chapters 2 and 3 for general processes, and see earlier for processes pertaining to common-ground considerations across different figures and accounts). A final issue concerns processes of *delivery* across figures – in order for a given kind of figurative language to accomplish a pragmatic effect, *how should it be said* (or written/shown/displayed)? As we will see, delivery characteristics also vary (and *may* vary) depending on the type of figure and its different available accounts.

Consider first delivery issues pertaining to an echoic mention versus a pretense account of verbal irony. According to these accounts, a speaker of verbal irony is directly quoting another person. But the speaker is simultaneously making obvious the fact that the quoting is a performance of portrayal. As such, it behooves speakers to say things a certain way. They need to first make the identity of the quoted person apparent. This may involve nothing more than getting the quote verbatim. It could involve, however, alterations to the verbatim comment if those make it more recognizable. Or it could require additional idiosyncratic

characteristics of the speaker and/or his or her original delivery. But ironic speakers also typically embed their performance with signs or signals about the attitude being conveyed. These typically involve mocking or derisive intonation and other cues given the frequency with which negative attitudes motivate ironic commentary. Such signals also may doubly serve just to note the presence of irony per se and, as a general category, do have a demonstrable effect on the perception of sarcasm (Woodland & Voyer 2011). But none of these signifiers individually is *necessary* for an ironic delivery and correct uptake. Indeed, irony often can sound and look essentially undistinguishable from earnest commentary. Still other usages mark irony with dead-pan, amused, or other types of delivery. How precisely to deliver irony thus varies greatly according to the contexts of the interlocutors and situations. No one technique is always maximally or otherwise effective. However, if a speaker wishes to use the pretense and/or echoic mention modes of delivery, he or she would nonetheless likely opt to adhere to the delivery parameters of those modes.

For echoic reminder and other subtle mechanisms of verbal irony delivery (see Colston 2000b; Kumon-Nakamura, Glucksberg & Brown 1995), given the lack of a singular, to-be-quoted speaker, the delivery requirements might differ slightly. More importance might ride on the plausibility and aptness of the utterance created to indicate the derided social norm, proposition, hypothetical person, and so on. Again, no deterministic pointers hold here for how to universally accomplish such delivery. But speakers nonetheless need to make apparent the targeted thing for the ironic commentary (Colston 2000b). Marking the irony in these subtler cases also may present a slightly higher challenge given the lack of a referent quotee to aid in that marking (as in echoic mention or pretense verbal irony). Again, though, many options apply, including dead-pan or seemingly earnest delivery, which places more reliance on the addressee(s) to fully figure out the ironic intent. Indeed, these latter kinds of delivery may excel at some pragmatic effects accordingly (e.g., mastery display, ingratiation, or social engineering).

Related to delivery issues for verbal irony is the debate over characteristics that constitute an ironic tone of voice. Specific ironic delivery signals such as nasal tonality, oscillating pitch, slowed speaking rate, increased volume, and prosodic contrasts (Bryant 2010; Clark & Gerrig 1984; Kreuz & Roberts 1995; Rockwell 2000, 2007) have been found to accompany some deliveries of verbal irony (see Attardo [2000] for a broader review). Whether these characteristics are sufficient, necessary, or universally reliable signals

of irony, however, seems doubtful. Irony delivery has a wide range of options for success depending on many contextual and interlocutor factors. Broad patterns of general acoustic characteristics may fare better at approaching more universal signatures for an ironically intended delivery. For instance, native hearers were able to reliably identify sarcastic utterances that had been passed through a high-bandwidth filter (Bryant & Fox Tree 2002, 2005), but these patterns were indistinguishable from those of angry but nonironic, delivery. The likely take-home message is that some delivery characteristics may be effective at signaling ironic intent or conveying a speaker's expressed attitude in speaking ironically, but no universal set of characteristics may be claimed as constituting *the* ironic tone of voice (Seguin 2007).

Hyperbole also has been discussed as a marker for verbal irony. Whether hyperbole itself shows distinguishing delivery characteristics, however, is a relatively recent question (Claridge 2011; Ferré 2014). Although one might suppose that the inflation hypothesis of hyperbole would predict some such traits (Colston 2007), to the extent that the semantic or schematic inflation serves the process of making distinctive a discrepancy between actual and expected/desired/preferred events, one should predict that a similar acoustic or related demarcation should hold as well – with perhaps an acoustic emphasis being placed on lexical or other carriers of the semantic hyperbolic inflation (e.g., emphasis on extreme-case formulations in hyperbolic spoken utterances). Such a prediction has been borne out by recent observational studies on American English. Intonational patterns marking hyperbole themselves seem hyperbolic (Ferré 2014). As with verbal irony, this prediction would not stake claim on such markers being universal, but they nonetheless should hold up as reliable indicators of hyperbolic intent.

A similar speculation might be warranted for metaphor or metonymy/synocdoche. Would, for instance, speakers make acoustic or other prosodic demarcation of source domains in metaphor and/or on certain levels of corresponding variables within metaphors? Gibbs and Colston (2012) point out the serious challenges in appropriately making metaphor-to-metaphor (or metaphor-to-nonfigurative) comparisons. For sake of consideration, though, imagine, for instance, a single speaker naturally saying

"This printer is a lemon" (standard metaphor),
"This printer is a turd" (novel metaphor),
"This printer is a wreck" (ambiguous metaphor), and
"This printer is a failure" (nonfigurative) (4.19)

or

"This printer is toast" (standard metaphor),
"This printer is diseased" (novel metaphor),
"This printer is garbage" (ambiguous metaphor), and
"This printer is useless" (nonfigurative). (4.20)

Would reliable differences be observed, all else held equal, in speakers' natural deliveries of as-comparable-as-possible *nonfigurative* versus *metaphorical* constructions? Or would differences obtain between *novel* versus *standard* metaphors or even between different sentence structures as in the (4.19) versus (4.20) sets? Moreover, what would be the relative or interactive contribution of semantic polarity and intonation on perceived degree of expressed negativity?

Similar questions could be posed for metonymy/synecdoche – would speakers naturally use prosodic demarcation on different categories of referential terms? Would they demark referential terms that differ in semantic polarity as pertains to the derision pragmatic effect performed by these figures (at least when applied to people)? How would hearers then derive an assessment of the speaker's intended level of derision as a function of referential-term category and intonation variables? Consider, for instance, the following (adapted from Colston & Brooks 2008)[4]:

"Better brew a second pot; corner booth wants another cup" (proximal metonymy),
"Better brew a second pot; brown eyes wants another cup" (personal synecdoche),
"Better brew a second pot; that guy wants another cup" ((nonfigurative))

or

"Better brew a second pot; brown eyes wants another cup" (personal synecdoche, positive),
"Better brew a second pot; red eyes wants another cup" (personal synecdoche, negative),
"Better brew a second pot, that guy wants another cup" (nonfigurative).

Figures that rely on certain structural characteristics for some of their pragmatic effects also might show advantages if speakers' prosodic demarcations align with those structural components. Consider rhythmic demarcation of stripped noun phrases in asyndeton:

"Been there, done that" (standard asyndeton) and
"You go, you paint, you leave" (novel asyndeton). (4.23)

Consider also disbelief expressions. These also may show improved pragmatic effect performance if prosodic cues mark the key structural variables underlying those figures (emphasized in the examples):

"We did *not* just drive here for nothing" (*not* expressions),
"Don't *tell* me we just drove here for nothing" (*tell* expressions), and
"I can't *believe* we just drove here for nothing" (*believe* expressions). (4.24)

Some relatively fixed figurative forms such as proverbs and some idioms also have rhythmic and other patterns as part of their structure. Note the rising and falling intonation common in certain proverbs and idioms:

"In for a penny, in for a pound,"
"You win some; you lose some," and
"The bigger they are, the harder they fall." (4.25)

Prosodic issues concerning delivery in many figures, however, go way beyond simple questions about marking or stressing of key lexical or larger items in short constructions. Larger discourses reveal intricate details of emotional and attitude expression along with subtle interweavings of prosodic and other markings. Consider the following brief exchange from series 5, episode 21 of the 1990s American television comedy *Seinfeld* and the subtleties of prosody interrelating with verbal irony (Cowan et al. 1994). The characters are friends George, Elaine, and Jerry, who are about to order lunch from a waitress in a coffee shop. George has just been complaining that every decision in his life has been wrong and that everything has therefore turned out the opposite of what he would have liked.

WAITRESS:	<*To George, remembering his usual order*> "Tuna on toast, coleslaw, cup of coffee."
GEORGE:	"Yeah. No, no, no, wait a minute, I always have tuna on toast. Nothing's ever worked out for me with tuna on toast. I want the complete opposite of tuna on toast. Chicken salad … on rye … untoasted … with a side of potato salad … and a cup of tea! Ha!"
ELAINE:	"Well, there's no telling what can happen from this."
JERRY:	"You know chicken salad is not the opposite of tuna; salmon is the opposite of tuna, 'cos salmon swim against the current, and the tuna swim with it."
GEORGE:	<pause> "Good for the tuna." (4.26)

The last three turns in this conversation, starting with Elaine's, are ironic. But they each use very different spoken prosodic and multimodal patterns. Elaine's comment is made lightheartedly, while she is slightly smiling.

Jerry's begins with a rapid pace, as if he's seriously debating the issue, but then he switches to feigned childlike intrigue and prideful knowledge over the way fish swim (including hand gestures to illustrate fish swimming), with raised eyebrows, nodding, and his tongue pushing out his cheek as if in deep and serious contemplation and cooperative persuasion. George's is unmasked sneering.

These cues, along with the contrast mechanisms implored, deliver the speakers' ironic commentary and emotional content. Elaine's comment pretends to find George's plan to do the opposite of his natural instincts interesting and intriguingly unpredictable, but her delicate tone and vague wording do not express much derision but rather indicate bemusement. Indeed, one can take a nonfigurative read on her observation of unpredictability – that events could possibly turn out badly. Thus her irony is diluted, and her feelings toward George and his plan are negative but not very biting. Jerry's comment also pretends to take George's plan seriously by first quickly laying down the tenets of his response, but then he points out a subtle but detailed flaw in George's argument, as if trying in earnest to help George get his plan correct. Jerry's pretended quibbling and feigned serious editorship to repair a small flaw in George's plan serve to show that the plan is in fact fraught with flaws and actually not worthy of much thought. Thus Jerry's irony is richer (pretending to find the plan interesting to show that it is not *and* pretending to focus on a single fault to instead demonstrate many) and, accordingly, expresses a stronger negative attitude – Jerry thinks George and his plan are stupid. But Jerry's retort is also funny. George then pretends to take Jerry's suggested adjustment to the plan seriously, but he does so only weakly by semantically following up on one of Jerry's smaller points and not in a way that connects well with regard to a contemplation of opposition. George also does not bother to hide his sneering annoyance at his friends' riffing on his plan. Thus his irony is weak structurally, but his emotions are unhidden, obvious, and strongly negative.

This brief example shows that structures of contrast in verbal irony, mechanisms of multimodal marking and signaling, and the resulting commentary and emotional/attitude expression are dynamic, interrelated, nondeterministic, and, most important, susceptible to longer patterns of interpersonal interactions over a broader discourse with many turns in a context. One could argue, for instance, that George's final weak irony but strong and genuine negative emotional response are a result of the *buildup* of critical commentary and negative emotion expression by his interlocutors toward him over the conversation. They are not just a response to Jerry's previous turn.[5] George may be so fatigued at this buildup that he bothers neither to create an

intricate ironic contrast nor to mask his emotions. The well-developed characters and their history of behavior patterns, known to one another (and the viewing audience), also contribute to particular individual responses. They do so in the form of both figurative productions and reactions to figurative usages. *How* irony or other figures accomplishes pragmatic effects through their delivery is thus a matter of many factors. Not all of these factors are predictable nor short term, and their interactions are highly complex.[6]

Another issue concerning figurative language delivery pertains to fixed forms such as proverbs and some contextual expressions and idioms. The level of decomposability of these forms can affect how a speaker should say them for maximal pragmatic effect accomplishment (Gibbs, Nayak & Cutting 1989; Richards 2001; Van de Voort & Vonk 2014). For instance, a speaker might be able to modulate the operation of the objectification pragmatic effect by altering the fixedness of a proverb or other fixed form. Perhaps as a function of the degree of alteration, the speaker might reduce the objectification somewhat and gain some ownership over the information expressed, advice given, or attitude revealed by the figure. Consider a speaker using standard and customized versions of an idiom, a proverb, and a contextual expression:

> "Did you hear about Dave? He kicked the bucket" (standard idiom),
> "Did you hear about Dave? His bucket got kicked" (customized idiom), and
> "Did you hear about Dave? Talk about a bucket kicking" (customized idiom) (4.27)

or

> "Oh, on that job offer, look before you leap" (standard idiom),
> "Oh, on that job offer, look closely before you leap on it" (customized idiom), and
> "Oh, on that job offer, lookie lookie 'fore you leapie leapie" (customized idiom) (4.28)

or

> A teenage girl is returning to a Skype call with a friend after having been called away briefly by her visiting grandfather, who wanted to give her some advice about school. The friend asks what the grandfather told her, and the girl replies
> "Oh, he said, 'Every school door is a window.' That must be his, 'Life is like a box of chocolates' line" (standard contextual expression),

> "Oh, he said, 'Every school door is a window.' That must be his, 'School is like a box of chocolates' line" (customized contextual expression), and
> "Oh, he said, 'Every school door is a window.' That must be his, 'Education is like a box of chocolates' line" (customized contextual expression). (4.29)

Speakers of the more customized versions of the fixed forms not only may reduce the performance of some pragmatic effects (e.g., objectification), but they also may increase the performance of others (e.g., meaning enhancement, mastery display, or catalyzation).

This brief commentary on delivery issues in figurative language use is by no means an exhaustive treatment of the relevant topics. Greater consideration of multimodal means of delivery and figurative language usage, as just one example, are crucial to fully understand the complexities of speakers' successful (and failed) leveraging of pragmatic effects. A speaker, for instance, can merely direct his or her gaze at a particular addressee for an instant to coincide with the uttering of a metaphorical source domain to achieve an ironic (or other) interpretation of that metaphor (along with concomitant pragmatic effects) for that targeted person and anyone who witnesses the glance. For example, imaging a coach saying at a postgame press conference

> "Don't worry, we'll prevail and win this series. My players have more than enough cojones to spare" (4.30)

while glancing briefly at one particular player when saying "cojones," a team member whose meekness at a crucial moment lost the team the just-completed game.

Written and electronic forms of delivery also pose rich and rapidly changing environments in which to achieve pragmatic effects in figurative (and other) language usage. Indeed, the very font used to print a message can achieve irony. Consider the following printed yard sign observed by me at the onset of the Iraq-US war, with antiwar messages printed in a stereotypically military stencil font:

WAR IS NOT THE ANSWER.
PEACE IN OUR TIME. (4.31)

Blends of text or spoken language and images are also very powerful means of achieving and enhancing varieties of pragmatic effects. Indeed, incorporating visual and auditory (e.g., music) media with spoken language and written text may open up entirely new categories of pragmatic effects and possible means of accomplishing them. For just a simple example, consider easily found Internet images depicting city buses involved in accidents or traffic holdups photographed with the word "sorry" showing

on the bus's large route sign. The humor and potential irony in such images can be enhanced by the realistic and coincidental nature of such a blend of verbal and situational irony happening by accident in an actual setting.[7] Coupled with this are the relevance considerations brought about by a photographer capturing the image and multiple other people posting and reposting it in various ways for different purposes. One such posting that I witnessed cast one of these images as a moderately teasing commentary about stereotypical Canadian politeness (http://www.carthrottle.com/this-canadian-bus-is-so-polite-it-says-sorry-for-crashing/).

PRAGMATIC EFFECTS FOR SPEAKERS

The last sense of the how-do-you-use-X question put new emphasis on the typically underrated attention given to users of figurative language – or to ask how figurative language is used *for speakers*. Essentially all the pragmatic effects discussed in Chapter 3, both general and coupled with particular figures, have significant impacts on speakers of the figures. An emergent advantageous effect for speakers that interestingly may even include health benefits is also noteworthy.

To briefly demonstrate the impact of the previously discussed pragmatic effects on speakers, consider them grouped as follows (a few effects appear in more than one category):

External Benefits		
Improve Speaker's Status	Reduce Negative Appearance	Internal Benefits
Ingratiation	Modulating negativity	Catalyzation
Persuasion	Objectification	Efficiency
Social engineering	Humor	Impoliteness
Catalyzation	Politeness	Humor
Efficiency	Tension reduction	Identification
Mastery	Machiavellianism	Guiding others' actions
Enhancing meaning	Guiding others' actions	Tension reduction*
Highlighting discrepancies	—	Meaning enhancement*
Identification	—	Highlighting discrepancies*
Humor	—	Emotion expression*
Emotion elicitation	—	Mastery*
Extollation	—	—
Impoliteness	—	—
Tension reduction	—	—
Machiavellianism	—	—
Guiding others' actions	—	—

The groupings in these columns are not meant to be unduly rigid. One may easily argue for placing a pragmatic effect in more than one column or in a different column. As a generalization of the primary thrust of the pragmatic effects, though, they seem to fall into something like the presented categories. The first column lists effects that mostly have an impact on other people or operate through other people and, either solely or additionally, often serve to improve those people's perception of the speaker's status. For instance, *persuasion* changes another person's mind, *enhancing meaning* alters/improves other people's understanding, and so on. Moreover, *ingratiation* gets other people to feel good about the speaker, *mastery* makes other people appreciate the speaker's skill, and so on. Note also the complex interrelationships between these effects discussed previously (i.e., *humor* can boost *ingratiation*, which can affect *mastery*).

The effects in the second column also seek to affect others and/or improve the speaker's status, but they do so more through a mediation of negativity rather than a gain in positivity. The term *modulating negativity* is used instead of *expressing negativity* to reflect this difference. For instance, a speaker can use irony to deliver a criticism, but the speaker also can modulate how negative he or she is in making that criticism.

Finally, the third column lists effects that are possibly more internal to the speaker. They include things a speaker may seek for personal enjoyment, whether or not they operate in or on other people. Speakers may, for instance, feel good at *catalyzing* talk in a situation. They might enjoy making their own contribution to *humor*, but perhaps most important internally, they may greatly enjoy the *tension reduction* produced by gaining a better understanding of something via *meaning enhancement* or *highlighting discrepancies*. These allow speakers to *express emotion* and feel good over their *mastery* of the situation. This latter cluster of pragmatic effects, indicated by an asterisk, seems to constitute an important conceptual and emotional milestone frequently brought about for a speaker through figurative language use, *cathartic conceptualization*.[8]

Cathartic conceptualization is related to the narrower *ingratiation* pragmatic effect, as well as the subjective "glow" discussed earlier, that arise occasionally when a hearer encounters a particularly apt metaphor especially. It also can arise with some other kind of pointedly meaningful figurative language. For cathartic conceptualization, though, the effect is brought about within speakers when they themselves *generate* an apt, novel, clever metaphor or other illustrative figure that serves to concisely conceptualize a complex meaning for them.

Cathartic conceptualization is part of why advice, treatments, and therapies that employ or advocate self-generated metaphor, narrative, and visual imagery practices can be useful at helping people deal with problems they are experiencing (Kopp 1995; Legowski & Brownlee 2001; Loue 2008). Indeed, narrative approaches to therapeutic wellness, which often end up containing a great deal of client-generated metaphor, can have fairly strong and readily demonstrable general health benefits (Pennebaker 1993, 1997, 2000). Most of these benefits arise from the positive feelings speakers experience both in crafting new kinds of meanings they previously did not have, especially when those meanings are concentrated in a concise figure, and in overcoming the inherent confusion, fear, worry, and stress from not feeling they have a sense of understanding of complex personal problems. Metaphorical and other figures enable these gains in understanding and can connect frequently with long-standing deeper cognitive semantic and schematic structures (i.e., conceptual metaphor). They can accordingly afford insights into potential underpinnings of the problems, allowing automaticity in contemplation of the issues and thus enabling easier access to potential solutions.

5

What Is Figurative Language *Use*? Prevalences, Problems, and Promise

This chapter considers what figurative language *use* by people actually is, including its scope, along with that of its accompanying pragmatic effects. Possible new figurative forms and pragmatic effects, including the role creativity plays in them, along with analogous potential effects in nonlinguistic figurative forms, are also discussed. Potential limits on figurative language use and its pragmatic effects are then treated. This includes a discussion of internal constraints on pragmatic effects for producers and comprehenders.

What is the expanse of figurative language use and its accompanying pragmatic effects in the universe of human language around us, both in current live usage and in recorded forms? How often do people speak, have people spoken, figuratively? How frequently does figurative language appear, has it appeared, in written form? What are the relative prevalences of different specific figurative forms in spoken and written media (now and in the past)? How often do pragmatic effects as a whole and across specific kinds of figures accompany these usages of figurative language?

As we have seen at the outset of previous chapters, questions such as these are thorny when considered closely. Both conceptually and methodologically, ascertaining the quantities of current and past usages of figurative language and its pragmatic effects seems daunting. Nonetheless, we have ways of measuring such talk and its effects from a number of allied disciplines. New methods are also undergoing rapid development.

Consider first, though, the challenge of measuring the prevalence of figurative language types themselves without their effects (Semino, Heywood & Short 2004). To measure the prevalence of figurative language, it first must be identified. Certainly many instances of figurative language are identifiable by experts and perhaps even novices given adequate training, but even experts on figurative language are not always in agreement on definitions, distinguishing characteristics, and the necessary conditions of all figurative

forms (Pragglejaz Group 2007). As discussed previously, some figures morph into one another such that distinguishability may be impossible (consider the metaphors and metonymies discussed in Chapter 3). The presumed boundary between figurative and nonfigurative language is also fuzzier than many realize (Gibbs & Colston 2012; Goatly 1997; Grady, Oakly & Coulson 1999; Sperber & Wilson 1986, 1995), especially in authentic data. At what point, for instance, does the phrase

"This is garbage" (5.1)

switch between a nonfigurative and a metaphorical statement? Or, given the more abstract sense of "garbage" as *anything useless or unwanted*, is there a basis for (5.1) *ever* being metaphorical? Then the issue of blends of figures, considered in Chapter 2, arises again, but this time for quantification purposes – if a given construction is reasonably metaphorical but also potentially mildly hyperbolic, should it be counted as a full instance of a usage of both? Or when figures are of several different kinds simultaneously, with varying degrees of exemplification, should they be counted as whole examples of each? If not, then what kind of fractional quantification should be used – relative to how many identifiable figures are present in a given construction, how *well* does a construction exemplify a given figure type or something else? Consider, for instance, figures in which inclusion of both figurative and nonfigurative referential components produces something part metaphor, part metonymy/synecdoche, part hyperbole, and even part simile and nonfigurative (each is an actual construction overheard by the author):

"Her moose of a dog,"
"Her ape of a boyfriend,"
"His badger of a mother,"
"Shit-for-brains,"
"Thunderpaws" (for a cat), and
"Planet Justine" (for a woman). (5.2)

Where and when a figure begins and ends in a discourse are also very slippery issues for quantitative purposes. For example, what proportion of the following short exchange is metaphorical versus nonfigurative?

MOTHER: "Yay! We're going up to the restaurant now (5.3a)
so hop up with Grampa." (5.3b)
SON: "I don't want to ride with Grampa. He's a big, slow turtle." (5.3c)

Is "up" in (5.3a) metaphorical (as in *up* the road) or nonfigurative (as in the restaurant is on top of a hill)? Is "hop" in (5.3b) metaphorical (as in *happiness* is *lively movement* [e.g., "She *danced* at the news" or "The place was *hopping*"] or *accomplishment* is *movement through physical space* or *simple accomplishment* is *simple movement* ["*Skip* on over to" or "*Hop* in"]) or nonfigurative (entering a vehicle requires a physical jump)? To what extent should "up" in (5.3b) be considered part of the metaphor if the "hop" in (5.3b) is deemed to be metaphorical? And if "turtle" is metaphorical in (5.3c), are "big" and "slow," also in (5.3c), part of that metaphor or not (i.e, is "big" modifying the metaphorical sense of turtle ["Grampa drives *very* slowly"] or the nonfigurative sense of the grandfather's size ["Grampa is big and drives slowly"])? Is "slow" modifying the nonfigurative or metaphorical sense of the grandfather ("Grampa is slow moving and drives slowly" versus "Grampa drives *very* slowly")?

Even if these questions are discernible, how does one quantify the *amount* of metaphor versus nonfigurative language in this passage (Kimmel 2008, 2010), by the number of words, clauses, constructions, or characters? This proportion is also greatly affected by the verbosity of either the metaphorical or nonfigurative part (the size of the phrase used to identify a source domain [e.g, "a turtle" versus "a stiff-limbed, old gray sea tortoise"] versus nonfigurative portions ["I don't want to ride with …" versus "I really, really don't want to ride to the restaurant with …"]).

Any proportion of figurative to nonfigurative language also ideally would have to isolate that nonfigurative component, which without parallel analysis of all figurative forms may appear misleading. For instance, if an analysis reveals that 10 percent of language is metaphorical, leaving 90 percent as presumably nonmetaphorical, then what portion of that 90 percent is indeed *nonfigurative*? If an additional 10 percent is verbal irony, another 8 percent hyperbole, and so on, then what remains as nonfigurative for comparison with the metaphor frequency? Moreover, as with any kind of derivation of this sort, the picture would be undoubtedly more complex with many categories of figurative blends.[1] Further compounding quantification is the ebb and flow of some figurative language in a discourse, raising the issue of first mention versus remention of a particular figure. If a person is identified initially with a synecdochic reference, for example, from a *Seinfeld* episode, such as "denim-vest," as in

> "Oh, I got *denim vest* checking me out. Fake phone number's coming out tonight" (Burg, O'Keefe & Schaffer 1997), (5.4)

but then that reference to the same target is used multiple times by the same (or other) speaker across a discourse, should each subsequent usage

be counted as a full instance of synecdoche, or should novel and repeated usages be counted differently?

Presume for the moment, though, that these identification, differentiation, demarcation, and quantification issues can be reasonably resolved. Would the job of prevalence measurement then just entail having groups of people observe current language use and review recorded language use and report their quantitative measurements accordingly? The problem now concerns both the enormity and diversity of those corpus and to-be-observed instances of language use. Consider diversity and ways to address it first.

CORPUS AND OBSERVATIONAL WORK

An arguable infinity of variables can be identified in corpora or observational data that divide categories of language use, assuming that it is even possible to objectively define any of them with widely accepted terms. Consider a small sample:

- live versus recorded
- professional versus nonprofessional
- emotional versus nonemotional
- educated versus lay
- formal versus informal
- emergency versus casual
- late nineteenth versus late twentieth century
- North versus South American
- technical versus nontechnical
- psychotic versus not
- predominantly inflected versus noninflected
- feminist versus not
- vital/revitalized versus going extinct/extinct
- fiction versus nonfiction
- monologue versus dialog versus other
- pre- versus postcolonial
- language A versus language B
- L1 versus L2
- language among intimates versus friends versus acquaintances versus met once versus strangers
- early childhood versus late childhood versus adolescent versus young adult versus adult versus elder

Of course, research using such divisions is long-standing and very useful for addressing local questions about some aspect of figurative language or its use (e.g., does metaphor of one kind appear more than another in diary work among terminal cancer patients versus other ailment sufferers). As a means to the end of *fully* quantifying figurative language use of all kinds in all categories of usage, though, this work would never end.

Some solutions, however, are clearly at hand. The broad task of prevalence assessment need not identify every possible language-use division category and then measure figurative language quantities in all emerging cross-category cells. It could instead identify a few major comparisons that address big, existing, or important questions such as the development of figurative language production (e.g., children younger than eight years versus people eight years of age and older).

One also need not delineate usage categories at all – an inclusive sampling of a wide variety or a random sampling of sources should deliver a reasonable approximation of prevalences of figurative types in overall language use. Here, though, is the problem of grossly computed en masse descriptive measures that may not be meaningful for all questions. If we find, for instance, that 17 percent of all language included in an analysis is reasonably defined as metaphorical, how useful is this? If a closer inspection reveals that the majority of that sampled usage contains very little metaphor but a minority is loaded with metaphorical language, producing the 17 percent mean when the categories are combined, then the take-home message is very different. This is essentially an insurmountable problem when working with a priori categories – to avoid the issue of an infinity of divisions, one must include wide sampling and satisfy oneself with central-tendency measures. However, to avoid the potential blandness of en masse central-tendency results (e.g., means), one must choose, define, and defend categorical-variable divisions, knowing that they might interact powerfully with a potentially infinite number of other variables, producing very different findings.

Multivariate analysis and modern statistical modeling approaches allow some gain on this problem, but issues with variable selection and resolution remain. For instance, if a large amount of language is analyzed with these methods, underlying causal or other key structures can *emerge* from the data. For instance, if the emotional tenor of a set of speakers is somehow measured and included in an analysis, along with all indices of different kinds of metaphorical language used by those speakers (e.g., a rating is made of how emotional each speaker is when uttering each metaphor), findings might reveal that people use more of one kind of metaphor (e.g., with *very* concrete source domains) than another (e.g., *less* concrete source domains) when emotions are strong. Of course, it might behoove researchers to conduct further work to verify such a finding experimentally to ensure accurate identification of that supposed causal link between emotion and source domain type. But the finding still would be useful – it can at least inform what kinds of experimental work needs doing and can provide corroboration findings with authentic data and settings.

However, one is still faced with the problem of deciding what variables to include in a multivariate analysis and at what resolution to code *any* included variables. For instance, should an independent *overall* measure of emotional tendency be included for each speaker (e.g., perhaps from a standardized emotional personality measure)? Would one need to distinguish between the polarity of emotions shown when the speakers use the metaphors (e.g., positive versus negative)? At how fine grained a resolution should the expressed emotions be encoded regardless of their polarity (e.g., just "weak" versus "strong" or via a ten-point graded scale)? An additional practical problem is that many scholars of figurative and indirect language are simply not trained in using such statistical methods. This may be changing, though, with the increasingly wide use of sophisticated quantitative empirical data and statistical analyses.

Let us again propose that the diversity issue is surmountable, though. Either through culled category selection, random sampling, multivariate analysis, structural equation modeling, or other techniques to produce statistically or otherwise derived meaningful categories, we arrive at a manageable strategy to frame the prevalence question. Now we face the issue of enormity. Given the scale of possible data for inclusion, from currently available to potentially obtained corpora to all types of possible observational data collectible going forward, an awful lot of language would need vigilant assessment. Fortunately, a number of approaches to streamlining search and identification of figurative language have been advanced, and although the capacity for fully encompassed, highly reliable machine identification of wide varieties of figurative forms is not at hand, rapid advances in this work offer some promise.

FIGURATIVE LANGUAGE PREVALENCE(S)

One solution to the enormity problem is to use software to cull through recorded language data, either textual or audio/video, and identify/count instances of different kinds of figurative language. Such an effort is very complex, especially for certain figures, but significant gains have been made. Some figurative forms, for example, can readily be identified and quantified with relatively automated machine searching, whereas for other figurative forms machines provide support for parallel or subsequent manual screening and analysis. Such *corpus-assisted discourse studies* (CADS) show much promise at improving machine-assisted and machine-conducted prevalence assessment for a variety of kinds of figurative and other language, although the ultimate degree to which machine-conducted research may

fully and reliably conduct autonomous identification and quantification remains in question (Partington, Duguid & Taylor 2013).

Fixed Forms

Machine identification and quantification of fixed forms (i.e., proverbs, idioms, etc.) can be reasonably straightforward given the relatively nonvariable nature of these figures. However, to the extent that the figures are (1) decomposable and (2) potentially used nonfiguratively, human vigilance of corpus searches remains necessary (e.g., "Beans are once again the primary thing she has taken it upon herself to spill," used idiomatically, or "He spilled the beans all over the kitchen counter," said nonfiguratively). For less fixed figures, the problem is more difficult.

Metaphor and Pragglejaz

A great deal of effort has been put forth to refine procedures to *manually* identify metaphors and other figures in discourse, and computers can aid in this process. Corpus searches that make use of key terms in target domains (e.g., "constitution" or "European Union") or for source-domain categories (e.g., animals) can enable faster selection of candidate constructions for further evaluation as metaphors (Ching-yu Hsieh 2006; Kimmel 2009). Searches based on clausal structures also can be assisted similarly (Yang 2013). One also can conduct metaphorical searches based on collocates (e.g., return all hits of collocated pairs that have one member residing in a predesignated set of exemplars from an abstract domain [human emotions {anger}] and the other residing in a concrete domain [names of animals {bear}/animal behavior verbs {roar}/etc.]). As yet, though, no fully automated system has been developed that can autonomously and reliably identify and quantify multiple kinds of metaphors in wide varieties of corpora despite advancements in this attempt (Fass 1991; Mason 2004; Sardinha 2006, 2012).

CADS addressing metaphor identification have been aided by advancements in manual/conceptual procedures to identify metaphors. Perhaps the most widely used early such procedure is the *Training Manuel for Identifying Figurative Language* (Barlow, Kerlin & Pollio 1971), which, although preceding computer-aided searches, was an interdisciplinary standard for identifying metaphor and other figurative types of language. More recent work has pursued family-resemblance approaches to metaphor identification (Cameron 1999, 2003), as well as search protocols based on conceptual

metaphor (Lakoff & Johnson 1980; Levitt, Korman & Angus 2000) and extensions in abstraction from source to target domains, among others (Schmitt 2005).

Perhaps the most widely recognized recent approach has been developed by the Pragglejaz Group,[2] labeled initially the *metaphor identification procedure* (MIP) and more recently the *metaphor identification procedure VU University Amsterdam* (MIPVU) (Pragglejaz Group 2007; Steen 2002; Steen et al. 2010). This procedure is based at its core on a systematic multistep process of explicitly directed decision making to (1) identify propositional meanings of lexical units in context, (2) determine whether more "basic" propositional meanings for those lexical units are identifiable, and (3) decide whether those basic propositional meanings are in contrast with the current meanings in context. If the third of these criteria is met by a lexical unit, it becomes a strong candidate for a metaphorical term or a portion of one.

Verbal Irony and Hyperbole

As with metaphor, fully machine-automated identification of all types of verbal irony is not currently possible, but CADS work is aided by refinements in explicit manual procedures.[3] A *verbal irony prodecure* (VIP) has been developed by Burgers, van Mulken, and Schellens (2011) based on a division between descriptive and evaluative usages of clauses embedded within instances of verbal irony. After an initial reading and full interpretation of a verbal irony utterance, each clause within the utterance is assessed for evaluative tone by a human reader. If a given clause's evaluative tone is relevantly on a different valance from the context or cocontext (e.g., the clausal evaluation is positive, but the context is negative), then the utterance is deemed ironic.

The explicit point-by-point protocol approaches to identifying figures in texts, such as for metaphor and verbal irony, are useful if only to force scholar/researchers to explicitly contemplate the kinds of decisions they make and when they make them when they manually identify figures of different kinds (Steen 2002). They also enable dissection of points of disagreement in pairs or groups of assessors. As global procedures, the protocols also help to clarify terms for approaching more automated means of identifying figures – they force systematic and public discussion, for instance, of important points of consideration (e.g., should lexical or clausal segments be the units of analysis?).

One shortcoming of these approaches, however, is that they involve initial full-text screenings by human users of the protocols before then

embarking on the point-by-point evaluation. As such, they are arguably triggering more top-down modes of assessment in users of the protocols, which assist in the later systematic evaluations of lexical items or clauses. If such protocols are to help design more automated approaches to figurative identification, then a circularity problem might arise – how can an automated system perform the systematic lexical- or clausal-based means of assessment accurately without having the top-down schemas or other evaluation tools presumably afforded by the initial overall read instruction given to human users? Thus these approaches are very useful, but thus far they may be dealing with only half the challenge of automated (or human) figurative identification.[4]

One additional point concerning verbal irony is that it may have an advantage over some figures, as might hyperbole (along with rhetorical questions and maybe indirect requests and others) in that auditory analysis, either machine or researcher conducted, may be applied to its identification. Although, as argued in Chapter 4, no definitive "ironic tone of voice" seems available as a universally reliable and uniform marker of irony, some reasonably reliable cues nonetheless may be readily available for searching audio/video recordings of speech (Caucci & Kreuz 2012; Bryant & Fox Tree 2005). Moreover, because humor is frequently a component of verbal irony and perhaps, to a lesser extent, hyperbole, its auditory signatures also may help with irony identification (Bryant 2011). However, as with an ironic tone of voice, such assistance will be limited – humor and irony do not have a simple linear causal relationship, and indeed, the tangle of connections between irony and humor is deceptively complex (Gibbs, Bryant & Colston 2014).

PRAGMATIC EFFECT PREVALENCE(S)

The discussion thus far has concentrated on *figurative language* prevalence assessment, requiring consideration of figurative language identification issues. Little attention has been paid to delineation of *pragmatic effect* prevalence assessment. It turns out that assessing *whether* a pragmatic effect has occurred as a result of a figurative usage can be fairly straightforward, albeit not without issues (see later). But measuring *how often* such effects occur is more difficult but also not without potential solutions.

Two general strategies will be considered: (1) measuring pragmatic effect prevalence in corpora or observations much like what was discussed for measuring figurative language prevalences and (2) determining the *likelihood* that a pragmatic effect would occur as a result of a given single instance of a figurative utterance and then estimating prevalence based on

that effect's likelihood along with (a) parameters that raise and lower it and (b) the prevalence of that figure itself. Both strategies are also yoked to the issue of identifying and quantifying figurative language itself – in order to see how often pragmatic effects occur in some data set of language, one first has to determine where the figurative utterances are, that is, to know where to look. Thus the solutions coming next are anchored to having first identified whether a figurative utterance occurred in a corpus or observational record. One also must know how often different figures appear overall in language for use in the formula required of strategy 2.

Multimodal Indicators

Some pragmatic effects would be accompanied by multimodal indicators and, on occasion, straightforward ones. Figures that produce *humor* as a pragmatic effect, for instance, can be assessed according to the presence of laughter (Bryant 2011), smiling, or other gestures indicating that a hearer/reader is experiencing humor. As discussed elsewhere, however, any such claims that laughter indicates humor or the absence of laughter shows lack of humor must be prefaced with a reminder about the complex relationship between humor and laughter. Humor occurs without laughter. Laughter occurs without humor. Correspondences between humor and laughter when they *do* co-occur are very complex – the causal direction can go either way, other causal factors can intervene between humor and laughter (and vice versa), and external causes can affect one but not the other or both. Essentially, humor and laughter *can* indicate each other and arguably do with some frequency, but one must be careful in claiming knowledge about the direct chain of causal events between humor and laughter (and around them) unless those events have somehow been explicitly measured (Gibbs, Bryant & Colston 2014).

The production by figures of positive, emotional, or subjective experiences in hearers/readers, aside from humor, also can be indicated multimodally. *Ingratiation*, *master display*, *identification* with a speaker's stance or aggression, *enhanced meaning*, *politeness*, and *tension reduction*, among others, might be evidenced by a hearer smiling, looking up, blushing, moving closer to a hearer, head nodding, or sighing. Of course, these are also not absolute indicators, but as a group and perhaps in comparison with levels of more negative affectual signals (e.g., facial expressions of disgust, eye rolling, anger displays, or head shaking) or neutral indicators (e.g., touching one's face or glancing briefly to the side), some degree of accuracy of determining broad emotional or subjective polarity might be possible.

Linguistic Indicators

Evidence of other pragmatic effects might reside in linguistic indicators that accompany or follow figurative utterances. *Outright* statements of affirmation (e.g., saying "Yes," "Uh-huh," or "Mmm hmmm") could be indicators of successful *persuasion*, *objectification*, or the positive affective states shown by multimodal indicators (e.g., *ingratiation* being revealed by an addressee smiling). *Catalyzation* might appear through *changes* in the nature of the addressees' talk before versus after a figurative utterance occurs. Addressees might talk faster, more abundantly, or about different or more diverse content after having been catalyzed by a figure. A series of studies, for example, has shown *catalyzation* of similar figurative-form usage resulting from a triggering figurative utterance (Corts 2006; Corts & Meyers 2002; Corts & Polio 1999; Kimmel 2010). *Enhanced meaning* in an addressee might appear through an increase in the measurable sophistication of preceding and postfigurative addressee commentary, somehow operationally defined. *Politeness* could show through an increased positive polarity in addressee remarks coming after a figurative utterance relative to before. Linguistic evidence also might indicate pragmatic effects having happened more indirectly. An uptick in *overall* positive polarity from before to after a figurative utterance could, for instance, also indicate any of the positive pragmatic effects discussed earlier, perhaps from the general ingratiation pragmatic effect.

Other, more subtle changes in language might correspond with different pragmatic effects. The language used by an addressee may begin to resemble that of the speaker, again somehow operationally defined, after a figurative utterance versus prior if the addressee has been *persuaded*. People may use more positive language after having been *socially engineered* upward compared with downward (who may use more negative language), again somehow defined in both cases – following versus preceding the figurative utterance that supposedly did the engineering. If the rate at which a conversation proceeds from one topic to the next is validly measurable, then a change on that measure from pre- to postfigurative utterance could indicate the subtle *efficiency* of pragmatic effect. Positive or negative *emotion elicitation* in addressees/overhearers also could appear as changes in general positive or negative tone in pre- versus postfigurative comments. And finally, successful *extollation* might show through an increase in terms synonymous with a figure's extollation target (e.g., as in a proverb advocating "caution," say, "Look before you leap"), again in a pre-post comparison.[5]

Control Comparisons

Searching for evidence of a pragmatic effect having occurred by using these kinds of comparisons of language before versus after a figurative utterance happens raises an important issue concerning scientific control that warrants brief mention. *Any* measurement seeking to determine whether a pragmatic effect happened, including the pre-post comparisons as well as the simple presence of ones discussed prior (e.g., smiling as an indicator of *ingratiation*), is best served with accompanying control conditions of measurement. The pre-post comparison, by definition, provides this as one possibility. Given such a comparison's likely inclusion of the same interlocutors, time frame, and setting, it should provide a decent test of the hypothesis at hand (e.g., do addressees smile more often after speakers say figurative utterances versus prior?).

Other kinds of controls are also possible. One could compare any presumed indicator of a pragmatic effect (e.g., smiling, more rapid talk, or increase in sophistication of talk) after a figurative utterance is made versus *after use of some other comparable nonfigurative utterance*, ideally keeping the interlocutor group and context as similar as possible. Using this strategy, the tighter such comparisons are, the more the cause of the pragmatic effect can be isolated. For instance, if indirectness per se is considered to be the pragmatic effect trigger, as in *ingratiation*, then comparisons varying primarily due to their figurativeness would be useful (e.g., figurative proverbs versus similar nonfigurative aphorisms advocating the same thing, as in "Look before you leap" versus "Better to be safe than sorry").[6]

However, given the potential to include enormous amounts of highly variable conversational data in corpus or observational analysis, the attempt to find such narrow comparisons may be averted. The opposite solution – allowing random diversity to obviate potential confounding variables – allows for dilution of extraneous causes. For example, a comparison seeking to find a pragmatic effect from a presumed marker (e.g., smiling, nodding, or increased sophistication after speakers utter a metaphor) could be compared with rates of those same markers after some other *randomly selected, nonfigurative, comparatively long* conversational turns. Given the vastness and diversity of the potential data comparison, extraneous causal variables in the control and experimental conditions likely would lose any systematic coherence.

Concretely, consider a random sample of 100 uses of novel or creative metaphors selected from a very large audio corpus (e.g., phone conversations among familiars) and some measure of subsequent addressee

pragmatic effect (e.g., frequency of overt statements of affirmation, operationally defined somehow [e.g., a fixed set of exemplars such as "Yes," "Sure," "Wow," or "Interesting"]). Within the same corpus, a random sample of 200 nonfigurative utterances is also measured for subsequent evidence of that addressee pragmatic effect. As long as some parameters are maintained (e.g., the duration of the measurement window from utterance offset kept constant in both conditions), then variability within that comparison window for all other relevant variables should be high. That diversity could diminish the possibility of other variables *systematically* creeping into the metaphor-nonmetaphor comparison and affecting the outcome of the effect markers.

For instance, presume that laughter, when accompanying speech, also leads to an increase in overt addressee affirmation statements as operationally defined earlier. The comparison as defined in the 100-metaphor versus 200-random discourse samples does not control for speaker laughter, as would occur in a carefully designed experiment, but rather allows that factor to vary naturally. Unless there is reason to believe that a systematic correlation exists between laughing and uttering a metaphor, either positive or negative, then laughter should not correspondingly align with or against metaphor usage. Sometimes a speaker laughs, sometimes he or she does not, when using both metaphors and nonfigurative remarks. Thus the widely variable and unsystematic diversity in the corpus data control arrangement could shield a researcher from systematic bias.[7]

Formula Derivation

The second strategy for quantifying pragmatic effect prevalences is to estimate them from a formula encompassing the prevalence of figurative language types, the likelihood that those figures would produce particular pragmatic effects, and relevant mediating parameters. How to measure figurative language prevalences has already been discussed. Let's thus consider factors affecting the likelihood that effects would get produced from figures.

Much of the work reviewed in Chapters 2 and 3 has addressed the question of what figures produce which effects (e.g., indirect requests *marshal action in other people* while addressing face issues, and synecdoche produces *derision*). Some of that work also got at mediating parameters (e.g., synecdoche produces *derision* more likely when used on people versus inanimate objects). What this work did not always evaluate, or at least directly, is the *likelihood* that a given figure will produce a particular effect. Some

likelihood estimates nonetheless could be derived from data used to evaluate which effects get produced by which figures. Returning briefly to the Roberts and Kreuz (1994) study discussed in Chapter 2, for instance, 56 percent of participants in that study thought that rhetorical questions resulted in the *expressing negativity* pragmatic effect compared with 94 percent for verbal irony. This difference can be construed as at least showing that verbal irony has a higher likelihood of *expressing negativity* than rhetorical questions and could even show that irony's likelihood is just under twice that of rhetorical questions, with the likelihood for irony being close to certainty.

Other, more narrowly directed studies evaluating how much a particular figure seems to produce a given effect, usually in comparison with other figures producing that effect, also can be squeezed into servicing assessments of effect likelihood, but not always with precision. Colston and Keller (1998), for instance, presented people with examples of speakers "expressing surprise" by using irony, hyperbole, a combination of the two, or nonfigurative comments. If "expressing surprise" can be roughly considered the same as *highlighting discrepancies* or *emotional expression* pragmatic effects, then this study speaks to the likelihood of irony or hyperbole performing those effects. The results revealed that both irony and hyperbole individually performed those effects more than nonfigurative commentary but did not differ from one another.[8] Combined irony and hyperbole also exceeded the pragmatic effect performance of either figure alone.

One thus can conclude from this study that irony and hyperbole are roughly equally likely to *highlight discrepancies* or *express emotion* (surprise). One unfortunately cannot infer, however, what the level of likelihood *is* – the nonfigurative item set in that study, albeit expressing less surprise than irony or hyperbole, cannot serve as a zero-effect performance baseline – all the stories in the study turned out differently than the speakers expected. Thus even the nonfigurative comments were producing the *highlighting discrepancies* and *emotional expression* pragmatic effects to some degree.

Compilation and New Studies

One major task awaiting future research is to review the array of studies making quantitative, pragmatic effect likelihood assessments of different kinds and to piece together current knowledge about these likelihoods. A better picture then would emerge about what gaps remain, allowing specific new studies to assess currently unknown or imprecise likelihoods.

Such new studies also do not require participant subjective ratings of likelihood, strength, and so on of pragmatic effect performance. Although

this basic design of crafting situations, typically with the participant placed amid the events and interlocutors, and then having the participants rate interlocutor utterance accomplishment levels (e.g., "How funny is the speaker's comment?" "How angry is this speaker?" and "How insulting is this statement?") has been useful, it is not without problems, and alternatives exist. One issue is the participants having to imagine themselves in the situations rather than genuinely experiencing them. Another is the adjacency of ratings on different kinds of figures – participants often rate, for example, an ironic remark's humor, followed by a nonfigurative remark's humor. Participants thus are overtly seeing the comparison being measured. A third issue is the subjective nature of these ratings – speakers consider and then report what they think about the figures, allowing subjective control over how they react.

Some alternatives could involve continued use of ratings but with more realistic tasks (e.g., live interactions with confederates in authentic situations). Or tasks could embed ratings amid multiple distracter activities or use indicative outcome measures (e.g., "You get to choose which of the people you just spoke with on the phone to work with you on the next puzzle. Who do you want?"). Still other alternatives could use direct physiological measures of emotional experiences in participants who encounter figurative language in realistic settings or more indirect indices such as eye tracking and visual/virtual world paradigms (Climie & Pexman 2008; Filik & Moxey 2010; Filik et al. 2014, Kowatch, Whalen & Pexman 2013; Nicholson, Whalen & Pexman 2013).

Finally, despite the issues discussed earlier about subjective ratings, tapping into people's intuitions about what pragmatic effects follow from what figures, and the likelihoods involved, is itself a valid source of evidence. That figures do certain things to people is not necessarily a secret, even if not frequently explicitly contemplated by an average person. Directly asking people what they think a figure might do and then having them report the likelihood of the figure doing it can tap into this knowledge store. Equally, asking people about their own subjective past *experiences* with figures or witnessed experiences of other people[9] can corroborate the other discussed means of measuring pragmatic effect performance and likelihood.

Mediators

Of course, all the work proposed earlier, the review of current literature, and new diverse studies to fill in knowledge about pragmatic effect accomplishments and likelihoods from different figures also should assess the

mediating factors that produce increases or decreases. Only then, finally, can a loose architecture of pragmatic effects' behavior under different circumstances be constructed. This formula, as said in other discussions of pragmatic effects, is not a deterministically rigid blueprint for predicting pragmatic effects. Rather, it could serve as a basis for *estimating* the prevalence of different pragmatic effects. For example, if sarcastic verbal ironies with a human target and echoic reminder constitute 9 percent of the language used across a large spectrum of variables, and if multiple studies average to a figure of an 80 percent likelihood that such ironies will result in *negativity expression* as a pragmatic effect, then one can estimate that roughly 7 percent of language use involves that pragmatic effect from that source.[10]

One other issue to bear in mind while contemplating quantifications of potential pragmatic effects is that not all pragmatic effects co-occur or immediately follow a figurative utterance – they can happen later. Some pragmatic effects also would show no observable or trace measures. Still other occurrences of pragmatic effect indicators could be false alarms, being produced by another underlying cause, including nonfigurative language.

It is nonetheless important to address this need for increased measurement of broad prevalences of different kinds of figurative language use and, relatedly, perhaps especially, pragmatic effect accomplishment. Although certainly a great deal of work has attempted to answer these questions for more local theoretical and empirical issues, an unfortunate gap remains in the present literature on these prevalences in terms of figurative/indirect language as a whole, types of figurative language as a whole, and whole practices of different pragmatic effects. Without greater knowledge about the current broad scope of usage of all figurative language/pragmatic effects across a wide array of authentic settings, it is difficult to assess whether these prevalences have changed over time, differ across important variables (e.g., culture, age groups, or media), or have reached *some kind of plateau*.

We know, for instance, that some local changes have taken place; for instance, chained metonymies can lose their transparency over time. The word "barbeque," for example, used to mean the wood on which meat was cooked, was then metonymically chained to mean something related to the meat itself and then again to the social event at which meat is cooked over wood. Now the initial sense is rarely used (Hilpert 2010; Nerlich & Clarke 2001). But we know less in the broadest sense about possible changes in figurative language and pragmatic effect status. Although certainly *tokens* of figurative language change over time and across cultures and generations,

do we know, for instance, whether *types* of figurative language have been exhausted? Are new figurative types possible? From where might they come? How might their use arise? And what new pragmatic effects might accompany them? These questions are addressed next.

IS FIGURATIVE LANGUAGE USED UP?

In what ways do we think that figurative language and its pragmatic effects could expand? Consider, by way of introduction, an American television commercial for the SBC Yahoo DSL service (2005). Although as an advertisement this example was likely designed and refined by a team of writers and other film or marketing people, it is easily envisionable as an actual occurrence between a speaker and hearer, so the characters and their communicative actions will be deconstructed accordingly.

A Figurative Collage

A woman is standing in a large closet, pulling clothing from a rack, holding up different outfits in front of a mirror, trying to decide what to wear. In the background, the opening slow and mellow moments from Eric Clapton's song, "Wonderful Tonight" (1977), are playing with the following lyrics heard aloud:

"It's late in the evening, she's wondering what clothes to wear." (5.5)

Then the song abruptly stops, and the second line plays again and then a third time. The woman notices this about midway through the first repetition and pokes her head out of the closet, where she sees her boyfriend or husband sitting in a chair, intently focused on a laptop. He had been replaying the song lyric with the computer (the commercial was advertising the Internet service that allowed him easy fingertip access to and control over the recorded song).

Although this seems to be a fairly brief and simple expression on the man's part, the accompaniment of music, audio, the means of expression, repetition, timing, ambiguity, and several other factors might warrant its consideration as a new kind of figure. Or at least it is a novel and deceptively complex combination of figurative mechanisms, including fixedness, iconicity, irony, hyperbole, perhaps colloquial tautology, and even metaphoricity/idiomaticity without really *being* fully any one of these figures. It accordingly results in an interesting mixture of pragmatic effects, including among others, *highlighting discrepancies*, *negativity expression*,

identification, *humor*, *emotion expression*, *meaning enhancement*, and perhaps attempted but failed *persuasion*, *objectification*, *guiding actions in other people*, and *emotion elicitation*.

First, the man expresses, in a way (by playing aloud on his laptop), a fixed expression, much like a proverb or idiom – the song and the opening lyrics are widely recognized, and probably liked, by a great number of people internationally. This fixed form is richer than the usual proverb, though, given how it contains music as well as the lyrics, along with emotion, mood, and associates of the song and its artist and even knowledge about the rest of the song. At the same time, the fixed form is also sparser – not containing a moral or theme, like a proverb, at least within the repeated lyrics. The man misrepresents the fixed form, however, by playing multiple repetitions of the second lyric – normally, the song or artist playing it does not do this, which triggers a number of other interesting figurative mechanisms.

An element of iconicity is created by the repetitions of the statement, "She's wondering what clothes to wear" (the man plays this lyric three times). First, the repetition indicates, from the man's perspective, that something that should take a relatively short time (i.e., playing the lyric once/a prompt decision about what to wear) is actually taking much longer (i.e., playing the lyric three times/a prolonged decision about what to wear). The repetition also iconizes the redundancy, again from the man's perspective, of the woman's behavior – trying out, or trying on, clothing over and over. The recurring lyric also could iconize the man's view that each clothing outfit is exactly the same as the previous ones.

The man's expression also has a hint of hyperbole. The repetition is an interesting and fairly novel means of inflating a discrepancy between expectations/preferences and reality – the man's first echoed statement explicitly draws attention to the fact that the woman is currently wondering about something – a state of affairs that is normally finite. The multiple *identical* repetitions of that statement then demonstrate that the woman's state of wonderment is continuing and, importantly, perhaps via mimicry of ellipsis, extending further into the future – the man also appears intent on continuing the repetition; he only stopped the audio, which had started a fourth cycle, when the woman appeared. The man thus insinuates that the woman's duration of clothing contemplation is *exceedingly* longer than it should be – to emphasize that it is *simply* longer that it should be.

One could argue also for an ironic component. The initial scene with the pleasant-looking woman, in a narrow depth-of-focus shot, nicely appointed wood and whicker closet, silken clothing draped on rounded wooden hangars, the lilting guitar riffs accompanied by Clapton's smokey, soft voice all

set a very mellow, relaxed mood. Then the repeating lyrics become apparent, and the mood quickly shifts to, at best, one of lighthearted humor and banter or, worse, to one of criticism or expressed frustration. This juxtaposition through alteration of a positive commentary presented by the man initially playing relaxing and complementary music (the title of the song being "Wonderful Tonight," with the recurring lyric, "You look wonderful tonight") that then changes to a more negative, evaluative criticism, although coupled with lighthearted humor and minimal excitement by the actors,[11] achieves an ironic character, albeit a subtle one.

An element of colloquial tautology also might be present, in that the repetition of the lyric or, conversely, the inability of the song to continue has a lack-of-closure quality to it. The sensation is not as pronounced as full-blown circularity in standard colloquial tautologies (e.g., "Kids will be kids"), which may be partly why the woman's response is one of balking at pursuing the man's enhanced meaning instead of pondering it toward profundity and being persuaded (see the brief discussion of tautologies as a form of oxymora in Chapter 3).

Perhaps most interesting, the man's expression even has a metaphorical and idiomatic quality to it. The impression given by the man's replaying of the lyric is of a phonograph record with a skip – some physical damage to the surface of a vinyl record causing the needle to revert to an earlier record groove resulting in an endless loop of repetition of some identical segment of the recording. As such, the man is mimicking a perhaps fading cultural meme or at least conjuring the idiom of "a broken record" in reference to the woman's behavior.

As for the pragmatic effects of the man's repetition, it is not fully clear which ones he intended. He may have been merely cathartically venting his internal frustration at the woman's lengthy dressing (perhaps evidenced by his apparent intense focus on the laptop – he looked up only briefly when the woman entered and spoke). Or he may have intended that she register his frustration and additionally perhaps acquiesce to his desire/request/plea/command that she speed up (indicated by the music being played loud enough to hear in the closet). Thus one could argue for at least a modicum of ambiguity on the man's part, although some pragmatic effects seem to happen nonetheless.

One pragmatic effect achieved by the man's expression is *highlighting discrepancies*. He effectively demonstrates that the actual behavior of the woman deviates from his expectations/desires/preferences. Some degree of *identification* is also apparent, in part perhaps to achieve the irony in his expression – by invoking the known mellow mood of the Clapton

song to serve as a backdrop of his criticism or frustration catharsis. This could have been accidental, however; the man may have chosen the song because the lyrics were such an apt description to what the woman was doing, and the mellow tone was artifactual. Either way, another pragmatic effect likely resulting is *humor*. The lyric repetition also almost certainly achieves *emotion expression* – whether for mere cathartic capture or for strategic remote control, the man's frustration is apparent.[12] Finally, again whether for venting or for manipulation, the repetition's clever, layered iconicity, metaphoricity, and idiomaticity achieve an *enrichment of meaning*.

If the man were on the side of the extended intention to actually alter the woman's behavior, he likely also attempted a number of pragmatic effects that, based on the woman's response, failed. *Persuasion* clearly did not happen – the woman completely dismissed even his suggestion that she might be taking too long, much less did she alter her behavior. This could be related to a failed attempt at *objectification*. The man's reference to the fixed expression in the song lyric might have offloaded some of the inherent criticism to the song rather than to the man. But the lyric in its original form does not convey the notion that *it is bad for someone to take too long at something*. This is only apparent through the man's multiple repetitions, demonstrating an active effort on his part to *construct* that notion, which puts the criticism ownership back onto him. *Guiding actions in other people* and *emotion elicitation* on his part to make the woman feel bad for keeping him waiting and heeding his wishes also failed – indeed, the resulting engineering put the man in an acquiescent role given his compliance to the woman's call that he cease his expression.

One additional point can be made about the *combination* of some of the pragmatic effects leveraged by the man's use of these figurative mechanisms. Through the inclusion of the more positive *humor* (irony, hyperbole) and *identification*, ([i.e., with the pleasant song] irony) with the relatively negative *discrepancy highlighting* (hyperbole and iconicity) and *negativity expression* (irony, hyperbole, and iconicity), the man was possibly trying to bolster his attempted *emotion elicitation*, *persuasion*, and ultimately *guiding actions in other people* – sugaring the pill as it were. As already noted, these latter pragmatic effects failed to happen. One additional reason for the failure could be the woman seeing through this attempt at softened manipulation in part because of its somewhat juvenile dorkiness or passive aggression (evidenced by her unflustered reaction and minimal effort at response), so resistance was easy. The man may have recognized this, however, in a last attempt to make his point. After the woman returns to the

closet, he plays the later lyric, "Yes, you look wonderful tonight," perhaps partly as a peace offer but also maybe imploring again, less indirectly this time, his view that he thinks she looks fine with what she is already wearing.

This example is offered to show first how varieties of portions of figurative pragmatic functioning may be cobbled together in arguably new ways. Collages such as this, as well as ones using other content, may be emerging as a new kind of figure, especially given increasingly greater access to usable content made possible by the Internet. One of the core mechanisms of this example, the repetition of a fixed cultural meme, also may rise above the set of other included processes to approach something like a new form or at least a new mechanism for pragmatic effect accomplishment.[13] This example thus nicely illustrates some of the flexibility left in figurative expression, leverageable by creative efforts to express things differently, as well as access to more content and new ways of displaying it. What follows is a brief listing of these and other means by which figurative language pragmatic effect performance might be expandable.

Fads and Fades

The life cycle of some expressions or constructions might support new kinds of figures (or figurative mechanisms) and effects. New fixed expressions/constructions occasionally appear, sometimes last for a time, perhaps rarely get established for long durations, and certainly fade from usage. They may even reemerge in usage at a later time. But even this waning later life can afford creative expressions perhaps to support some kinds of ironic usages and for different kinds of identification.

Consider a construction that made a brief appearance in the late 1980s, lasted into the 1990s, and then faded from usage – the retroactive negation construction in American English. To use this, a speaker would offer a seemingly earnest proposition for an addressee's consideration, pause for a moment, and then add the emphasized negation marker "not" at the end, obviating the initial proposition. For instance, imagine a father talking to his teenage son, who has been asking about getting a car:

> "Hey, I have a great idea. Why don't I go to the bank, withdraw the last of my savings, and go put a down payment on a new car for you!" <pause> "*Not*!" (5.6)

This construction seems closest to verbal irony in structure. It initially pretends an earnest meaning expression, but unlike pretense in irony, the falsity of the proposal is not made readily visible to the addressee. Then,

after establishing the initial meaning, the speaker abruptly negates the entire thing, revealing the disingenuousness of the expression thus far. On occasion, a speaker might *allude* to the disingenuousness, as the negation marker approaches, perhaps by slowly building the originally expressed meaning's absurdity or in some other way gently revealing the speaker's pretense. But the negation still trumps the initial meaning when uttered.

New constructions such as this may arise for a time but then fade, in part because of the *identification* pragmatic effect and its relation to *mastery* display. For instance, a speaker using a construction early in its ascendency of acceptance could appear to be clever and masterful in showing novelty, as well as possible identification with whatever the source of the construction was (e.g., had it arisen in an admired film). However, as the acceptance grows and more people notice and use the construction, its novelty wanes, and later adopters would be identified with a boring and less creative/individualistic mainstream. Thus the steepness of the arc of usage of a novel construction may itself afford different kinds of pragmatic effects and predict the likelihood of longer-term acceptance – if a construction gets popular fast, it may fade equally quickly. If its adoption is slower, it may last longer.[14]

As figures of various kinds fade from usage, either rapidly as in linguistic fads or more slowly for other reasons, they afford certain kinds of irony for speakers. Consider usage of quaint or old-fashioned terms of exclamation in ironic constructions (Colston 2015). Speakers can use outdated terms such as

> "My stars,"
> "Heavens to Betsy,"
> "Great Caesar's ghost,"
> "My heavens," or
> "Golly" (5.7)

in ironic commentary about the importance or interest they have in something. The datedness of the expressions (in American English) reveals the speaker's pretense at finding the referent topics interesting – a contemporary speaker would not likely use such exclamations earnestly.

Fixedness and Decompositionality

New instances of idioms and other relatively fixed forms (i.e., colloquial ironies) are occasionally created, sometimes enabled by new technologies or other content, such as historical events, that supply source material.

These new forms also can affect the *identification* pragmatic effect (e.g., identifying somehow with the source content). Two recent overheard examples demonstrate this. In the first, a person's culpability in forwarding a computer e-mail message to the wrong address was being questioned. A speaker defended the person with

"Oh, it was a total *pocket dial*." (5.8)

Another speaker was responding to an avid fan of a rival American sports team, who was boasting about his team having won the first game in a championship series, although considered the underdog. He argued that this was a sign that they would prevail. The speaker ironically replied

"Right. Game one, 'Mission Accomplished.' "[15] (5.9)

In (5.8) and (5.9), the particulars of the *identification* pragmatic effect are contemporary or recent – a person's familiarity with current technology (5.8) and his or her attitude toward US President George W. Bush (5.9).

To the extent that fixed expressions are decomposable, alterations to their prototypical forms may afford new twists of figurative expression. For example, consider a speaker invoking a common English idiom in reference to a person's spectacular death (e.g., perhaps a person heroically sacrificing his or her life to save many others):

"He didn't just kick the bucket, he punted that pail half a mile!" (5.10)

Here the speaker first anchors the idiomatic meaning but then hyperbolizes a reconstructed form of it – with the concomitant pragmatic effects entailed (e.g., *highlighting a discrepancy*). In finding a way to mix figures in this way, as well as anchoring and then adjusting the idiom, the speaker may leverage *mastery*, *ingratiation*, and perhaps other pragmatic effects.[16]

Other blends of figurative mechanisms also can produce interesting, potentially novel pragmatic effect combinations. Ironic usages of idioms, proverbs, contextual expressions, and general allusions to cultural references, for instance, can ironically deride not only the idiomatic, proverbial, contextual, and general senses of these relatively fixed terms but also the associations that go with them. Consider an avid science-fiction fan talking at length about some new blockbuster film in that genre to the point of boring his addressees/overhearers. On finishing, the fan notices the late hour and says that he has to leave, to which an overhearer replies ironically

"Yeah sure, 'May the Force be with you.' " (5.11)

Here, by ironically using the fixed phrase from another science-fiction franchise, *Star Wars* (Lucas 1977), used in those films as a colloquial well-wishing term, the overhearer not only belittles the notion of good wishes but also the genre of science fiction, its fans, their devotion, *and* the addressee.

If a referenced fixed expression is lengthy enough, it may enable unique enhancement of *mastery display*, interlocutor *ingratiation*, and possibly other effects. Consider first the level of these positive effects among interlocutors (in pairs or groups) when their figurativeness does not use fixed expressions, such as group banter or jocularity, as documented by Gibbs (2000). Speakers in these situations experience much enjoyment and camaraderie, built up in part by *ingratiation* and *mastery display*, along with *humor* and other effects, in their lengthier sequences of exchanged original irony. Now imagine, though, that the conversational turns by pairs or groups such as this actually correspond to some lengthy fixed expression from a movie scene, fiction dialog (i.e., from a novel or short story), or song lyric.

Consider a personal example. While sitting in a university departmental office on campus one day doing paperwork with a program assistant (PA), a young adjunct instructor (AI) entered appearing flustered, in a rush to class. The conversation begins with the adjunct asking me (HC) a question:

AI: <stressed>	"Do you know what time it is?"	
<pause>		
HC:	"Does anybody *really* know what time it is?"	
PA:	"Does anybody really *care*?"	
HC:	"About *time*?"	
PA:	"I can't imagine *why*."	
<pause>		
AI: <now smiling>	"We've all got time enough to cry!"	(5.12)

This discourse matches almost verbatim the lyrics from the song, "Does Anybody Really Know What Time It Is?" by the then-named American band Chicago Transit Authority, later renamed Chicago (Lamm 1970).[17] The coincidental alignment of this discourse as (1) a reasonably possible genuine nonfigurative conversation between these three interlocutors, (2) the lyrics from this well-known old song, as well as (3) an overall theme of the song – *don't worry about time* – provided a triple entendre quality to the exchange that, coupled with its shared, spontaneous construction, particularly enhanced the pragmatic effects involved (i.e., *ingratiation*, *identification*, *mastery*, *catylzation*, *humor*, and *tension reduction*).[18]

Profanity

The category of profane and similar terms, of which many members are figurative, is an interesting Petri dish for figurative expansion issues (as well as restriction issues; see later). Profanity has long existed because its content serves particular functions. Some overlap with pragmatic effects was already discussed, but others differ. Profanity serves the usual effects of *mastery display* and *social engineering*, for instance, as military drill sergeants know very well. It also can perform *identification* and perhaps especially *emotion expression*, among others. But profanity additionally can *shock*, *intimidate*, *rebel*, and *strongly emphasize* – as revealed in the occasional public "F-bomb" in English as well as with uncounted private, everyday usages of this and other profanities.

To serve these effects, terms must violate some set of mores on propriety, taboo, or unpleasant topics. Or they must break religious or secular rules about forbidden content or class. Multiple such restrictions are at play in most cultures, with waxing and waning strictness, of course. But they rarely disappear, nor are they likely to in the future. The tokens (and perhaps types), however, of profanity do follow a loose progression and circularity, with given terms once considered profane losing severity as they gain common usage and acceptance or being replaced altogether with stronger tokens. Euphemistic tangent terms, metanyms, and minced oaths also abound, serving their own niche of pragmatic effects (e.g., *politeness* and *identification*), as in "Gosh," "Jeez," "Darn," the "F-word," and "S – H – I – T."

Thus the category of profanity will always exist, with included terms evolving and changing, demonstrating a kind of expandability of figurative language and its effects. With altering levels of strictness, the scope of the category also might grow or shrink. But the nature of the profanity category and how it affords pragmatic effects seem to be a relative constant.

Creativity

Example (5.5) demonstrates that novel combinations of figurative mechanisms produce rich, perhaps new mixtures of pragmatic effects. These combinations are driven partly by human creativity to express meaning in broader ways. Creativity arises and interacts with figurativeness and pragmatic effects, though, through different means, two of which are treated here – channeling language through new technologies and internal needs of individual speakers.

As with any means of conveying and receiving language, sometimes constraints involved in media can produce bursts of creativity. This is especially apparent when text, talk, and multimodal expression are channeled through advancing technological media. Some of this venturi-tubed creativity results in pragmatic effects rather directly. To a somewhat lesser extent, it arrives via figurative mechanisms.

From the beginnings of talk being encapsulated by text, *written* forms have simultaneously constrained and enabled expression. Initial written forms, being devoid of intonational, prosodic, and multimodal cues, for instance, proliferated into different styles, levels of formality, and visual arrangements to expand their expressibility and pragmatic effects.[19] Use of various opportunities in a visual format, such as by font development and calligraphy, enabled meaning expression through *mastery display*, *identification*, and other pragmatic effects. Elaborate, ornate, and complex fonts, for instance, can indicate skill, power, prestige, wealth, and formality. Simpler depictions expressed the opposite trend. Initially, this elitism expression likely arose through a reader's or viewer's implicit appreciation of the skill, time, and effort apparent in elaborate textual presentation, along with cognitive dissonance – essentially the *mastery display* pragmatic effect. Later expression could detour through simpler *identification*.[20]

Creative uses of font and type characteristics, including punctuation, are also not exhausted. One example is the use of capitalization for irony. Although this technique has been used before, Marissa Pessl's much-lauded first novel, *Special Topics in Calamity Physics* (2006), portrayed a brilliant adolescent character who excelled at subtle ironic commentary, conveyed through, among other means, ironic capitalization in the novel's text[21]:

> BLUE VAN MEER: "Dad's Theory of Arrogance – that everyone always assumes they're the Principal Character of Desire and/or Loathing in everybody else's Broadway Play." (5.13)

The capitalized "Theory of Arrogance," "Principle Character," and "Broadway Play" are each ironic, although with different targets – in order, the importance of the father's theory, peoples' self-images of worth or worthlessness, and the value of what other people think.

When text became mechanized and literacy spread, *identification*-driven pragmatic effects could become broader, fixed cultural memes, allowing referencing to enable still more elaborate expression through a moderate form of *objectification*. As a few small examples, headline size in pamphlets, newspapers, and other distributed texts became an immediate indicator of language content importance. The word "extra" took on special meaning in

the newspaper business as a surface reference to out-of-the-ordinary printing in a periodical's typical schedule and as an exclamation. New idioms arose from text standardization (e.g., "Read *between the lines*," "Spell it out in *big bold letters*," "Read the *fine print*," and "Do I have to *spell it out* for you?"), as did multimodal expressions (e.g., air quotes, repeated palm-out arm extensions, and moving left to right as if sequentially indicating words on a billboard or large sign). Patchwork fonts, as if cobbled together from separate sources of text, also gained an identity of anonymous notation, easily referenced for its symbolism:

> "i F U e V E r WA n t 2 ceE H rb agI n" (from a colleague's joking e-mail response to a message from me apologizing for a technical glitch in my e-mail software, producing jumbles of different fonts that I had compared to a ransom note). (5.14)

Electronic manufacture and distribution of text enabled by computers, word processors, and e-mail crowd sourced creativity to a degree, allowing individuals enormously greater control over text usage. One arguable pragmatic effect implication was an enhancement of *social engineering*. An e-mail addressed to one or a few addressees but openly copied to a larger mailing list, easily done at an individual's fingertips, combines the power of opinion/editorial pieces in newspapers, historically reserved to a chosen minority of authors, with the *social engineering* capacity already available in a speaker talking to a live audience. Thus, via carefully crafted mass e-mail messages, any writer can insult some people/things while entertaining/lauding others and do so on a grand scale. Doing this to a large audience collectively aware of its size also might enhance mastery display (e.g., everyone witnesses the *mastery*, as well as fellow witnesses' realization of it – *mastery* becomes part of the audience common ground).

Most recent innovations in social text media and mobile texting, through a loosening and tightening, respectively, of media constraints, also have afforded pragmatic effects and figurative mechanisms. Posting text to broad audiences, frequently anonymously, as in online forums, allows writers to escape nearly all social conventions, politeness norms, logic constraints, accountability practices, and other social guidelines usually in place among interlocutors. Writers thus are free to pretend and provoke, held back only by what site moderators and policies will tolerate. Trollers and others using this *anonymedia* thus occasionally produce an incredible array of creative content using all the figurative and other mechanisms for achieving the full array of pragmatic effects, albeit sometimes at the cost of thoughtful intercourse.

What is different in this medium, however, is the potential variety of combinations of people and perspectives to comment on some common thread(s) and the infinity of tangents that such chatter can take. The anonymous posting wall also allows an incredible flexibility in topic changing, sometimes pursued and sometimes not, resulting often in chaotic streams of commentary. This, of course, can produce a Tower of Babble experience for readers but also fertile ground for creative expansion of figurativeness and pragmatic effects.

And, of course, texting applies here as well. The limiting constraints of a small keyboard and hand, usually thumb, dexterity when texting on cell phones and other devices have become obvious recent phenomena. They have resulted in a much-noticed and much-noted plethora of new acronymic and abbreviation terms, some of which have crossed into the spoken medium (e.g., a speaker saying "OMG" or "LOL").

Channeling *speech* through new technologies also has affected figurativeness and pragmatic effect accomplishment. Consider briefly how recording and speech broadcast tools influenced *social engineering*, *mastery display*, *persuasion*, and other effects. When speech first became recordable and broadcastable in the late nineteenth and early twentieth centuries, the widened audience likely influenced *master display*. As with text, although perhaps stronger, a speaker mutually and massively witnessed in an act of clever language usage can appear particularly skillful given the breadth of impact and the shared and simultaneously realized knowledge of that breadth.

As experience with broadcast and recorded speech increased, speakers also likely adjusted their figurativeness level and pragmatic effect leveraging to appeal to a common average befitting the large audience rather than a specialized constituency. A speaker concerned about maximizing *persuasion*, for instance, likely would choose a broadly appealing metaphor over a lesser recognizable one. Finally, as was the case with widely distributable text, nuances of *social engineering* emerged whereby speakers could favor and fault others on a much larger scale.

Future possible influences of technology on text and talk also may continue in this vein. Imagine animated avatars rendered in part from text, where mimicry of multimodal expressions is possible. This image of a human form could be animated with familiar gestures (e.g., arms first being thrown up and then placed akimbo on hips), and the textual component (e.g., depicting the torso or head) could progress through a sequence of lexical items to produce a readable sentence carefully aligned with the gestures. The sequence, "Oh," "fantastic," "my," "ticket," "has," "arrived," expressed in

this format, under the context of the avatar being a stage actor expecting to receive a lead role (i.e., being handed a king's crown) but receiving a bit part instead (i.e., being handed a janitor's mop) would provide a unique blend of ingredients. The ironic and metaphoric reading of the text can be influenced by gestures normally accompanying performed speech.

Technology also could greatly affect speech by affording live control to a speaker of characteristics of their voice. A person being able to speak into a microphone and alter his or her voice in real time and with wide variety as it emerges for a hearer, for instance, could afford numerous figurative mechanisms and pragmatic effects. Imagine a phone conversation between two young business partners, one of which is searching for a worthwhile charity to which to donate company funds. The other is not interested in this idea. The first partner's voice is his own, the second partner's voice begins as hers but then morphs into a stereotypical evil scientist contemplating a devilish plot as it approaches the phrase "just excellent":

PARTNER 1: "What do you think of this group? They provide free Internet service for minority-owned business startups."
PARTNER 2: "Free Internet for other businesses? I think that's just excellent!"[22] (5.15)

Alteration of voice characteristics can render this comment ironic, possibly adding *identification* and other effects if the alteration is a fixed expression or echoes a known person.

Creativity also interacts with figurative language and pragmatic effects through the more specific sense of an individual's internal needs. As discussed in Chapter 4 regarding cathartic conceptualization, figurative language itself, by supporting the means of creativity for speakers/writers, often enables therapeutic benefits. These are achieved in part through the internal pragmatic effects on speakers that some figures perform. People with a high personal need for creativity also can use figurative language to satisfy their personal drive to create or encounter novelty, unusualness, nonsequitorial or otherwise nonstandard content.

New Figures

Either by enhancing or tweaking preexisting figures or through relatively new mechanisms, a number of clever construction types might be evolving into new kinds of figurative language. As with the retroactive negation construction, these new figures may be only passing fads. Or they may have more longevity. But they nonetheless have ingredients of figurative or

indirect language – some form of nonveridicality with intended meanings that surpass mere underdeterminedness, a structure that itself may encapsulate or iconize meaning, accompanying pragmatic effects. Thus they remain candidates for new figures either now or in some possible future retro reawakening.

Contextual expressions serve as the central component in several new figure candidates. This could be the result of increased exposure and access to content enabled by Internet surfing and streaming media. Greater overall quantity of content itself, increasingly available to people through broadcast, movies, podcasts, the Internet and other distribution outlets, also could be a contributing factor.

Blends of contextual expressions, essentially combinations of contextual expression and double entendre (or multiple entendre), where two or more different contextual expressions are combined somehow, might achieve a wide variety of pragmatic effects depending on their content (i.e., do they contain metaphor, irony, etc.?). Given the somewhat unusual combination of terms already separately and fully dependent on specialized knowledge about some context, they also might collectively surpass at performing *social engineering* (only familiars, contemporaries, etc. would get the references), *ingratiation*, and perhaps *mastery display*:

> "Hey, don't worry. In thirty year's time, we'll be back to black in the future!" (overheard comment from one member of a couple taking out their first home mortgage – blending references to the 1980s, approximately thirty years *prior* to the comment, of the film *Back to the Future* and the song "Back in Black" [Canton et al. 1985; Johnson et al. 1980]). (5.16)
>
> "Koch whore" (often overheard label for Wisconsin Governor Scott Walker during the spring 2011 protests against public-sector union busting, blending references to a "coke whore," a person who trades sex for cocaine, and the Koch brothers, wealthy US backers of conservative political causes, including Walker's 2010 election campaign). (5.17)

Contextual expressions becoming fixed is another route to a new figure. A "vampire sneeze," for instance, gained popularity during a recent strong flu season in North America as a reference to a particular way of covering one's face when sneezing (i.e., with one's entire arm rather than hand). This is now used (in the United States and Canada at least) as a way of describing a common public health practice.

Contextual expressions reworked for a new figurative twist, interesting in one way by using them somewhat nonfiguratively, also can be used for an interesting combination of pragmatic effects. Consider the following line

from a Warner Brothers' Looney Tunes cartoon in which a psychiatrist is trying to get a rabbit to believe that he is a millionaire (the psychiatrist thinks that he is curing the actual millionaire who believes that he is a rabbit). The psychiatrist asks the rabbit to repeat this line as part of his therapy (the psychiatrist has a feigned Austrian accent):

> "I am Elmer J. Fudd, millionaire. I own a mansion und a yacht" (Foster 1955). (5.18a)

The line was used almost verbatim in a real setting by an authentic speaker who was describing his actual boss, who happened to own both a mansion and a yacht (the italicized part mimicked the cartoon psychiatrist's accent):

> "Oh, he's completely loaded. In fact, he's a billionaire. . . . *He owns a mansion und a yacht.*" (5.18b)

In another example, a speaker was conversing with several fellow Simpsons fans. The line reworked here was from a brief segment in a Simpsons episode where the mayor of the fictional town Springfield, Joe Quimby, was complaining about having to stand for reelection again. The real speaker reworked this line to bemoan the reelection of George Bush to the US presidency in 2004. The speaker mimicked Joe Quimby's stereotypical Kennedy family accent from Boston:

> "*Again*? This stupid country!" (Swartzwelder 1997). (5.19)

Reworked contextual expressions that remain figurative in their transplantation to another domain to provide a proverbial type of meaning are also possible. Here a contextual expression supporting a metameaning in original context is applied to a different setting to bring along and apply that metameaning. Consider first another example from the Simpsons, reworked in an authentic couple's conversation about their daughter's first lengthy trip from home and their reaction to her absence:

> MOTHER: "I really miss Meagan."
> FATHER: <jokingly> "Meagan? Meagan who?!"
> <pause>
> "We have a kitchen?!" (Vitti 2002). (5.20)

The father's latter line quotes a Simpson's episode where the character Homer is showing stupifying effects of his smoking a lot of marijuana – walking into his kitchen and showing amazement that they have one, when he has obviously been in the room many times. The father is thus borrowing a known example of someone saying something stupid, specifically about not noticing

something obviously present, to mark the irony in his initial comment. Or the father could be just self-deprecatingly softening his genuine confession of feeling partly relieved at his daughter's temporary absence.

These reworkings can bring in *identification* and *mastery display* as possible pragmatic effects, along with those that accompany double entendres, given that the relatively fixed contextual expressions can apply figuratively or nonfiguratively to the situation at hand. As contextual expressions, they also can *socially engineer*.

Another route to new figures is a combining of multiple figurative mechanisms into one construction, either eclectically as in the Eric Clapton song collage (5.5) or involving multiple instances of just one mechanism in one construction. Consider two types of the latter, collages of sound symbolism and of referential terms. In *sound-symbolism collages*, multiple correspondences of speech sounds and meaning (e.g., small things are high pitched, large things low pitched, or Latin-sounding terms are used for medical terminology) are compacted into a construction. The following examples create, respectively, a derogatory term for a stereotypically nerdy person and a pseudoterm pertaining to a purported affliction:

> "[He is a] neo-maxi-zoon-dweebie" (line from the film *The Breakfast Club* [Friesen & Meyer 1985]). (5.21a)
>
> "I'm not riding that thing [a roller coaster]; they give me Duodenum-mandible-itis" (overheard pseudoterm describing the feeling of having one's stomach in one's throat). (5.21b)

Referential collages combine multiple terms from a common genre into one multireference:

> "West Nile Chronic Cow Wasting Madness" and "Pretty Little Vampire Liar Diaries" (both uttered spontaneously by the author, the first in mock concern about catching a disease from mosquito bites and the second to pretend confusion about the title of a teenager's favorite Internet show). (5.22)

A twist on standard verbal irony and hyperbole that uses particularly strong contrasts between referenced negative outcomes and alluded positive desires/expectations/preferences, termed here, *shock irony*, may use a novel kind of pragmatic effect, *heightening awareness of something*, along with others, to express a point very strongly. Consider a public-service commercial (or supposed as such) aired on Australian Television called *Set Yourself Free*. The short film ironically pretends to seriously show the negative consequences of skipping school as a means of convincing young people to stay

in class – the text at the end of the film reads: "This is what happens when you slack off. Stay in school." But the portrayed consequences are wildly hyperbolic, with a group of teenagers meeting a gruesome end during an escapade of playing hookie at the beach. The embeddedness goes further in that the film was not actually a genuine public-service commercial. It was instead a satire of one created by viral video comedy team "henry & aaron" (Huffingtonpost, Canada, January 31, 2014; available at: http://www.huffingtonpost.ca/2014/01/30/set-yourself-free-psa_n_4699191.html?ir=Canada+Living&ref=topbar).

Another figure may be an emergent form of oxymoron, where a speaker professes to something but then immediately contradicts it. This kind of figure is similar to the retroactive negation construction in having a resemblance to irony. But there is no pretense mechanism during the disingenuous part to mark the irony. It thus can convey some of the same pragmatic effects as irony, but it also loses some of the blunt negativity of the retroactive *not* construction. Consider first a famous example from Henry Ford, followed by a commonly used token as a surprise form of reference, and then an authentic overheard comment said only partly in jest after a speaker refused to give spare change to a panhandler:

"You can have it in color you want, so long as it's black." (5.23)
"I won't mention any names, Jennifer." (5.24)
"I'm not the slightest bit heartless about it. It's just that I hate these lazy, no-good, motherfuckers who do this stupid shit." (5.25)

Other potential figures might make use of suffixation or prefixation using known morphemes to achieve interesting referential terms. These may carry a form of *identification*, as well as the subtle *efficiency* pragmatic effect, somewhat akin to the fluidity of metonymic reference. Consider the following three examples. The first was an overheard comment by a busboy in a restaurant to a dishwasher, saying that he needed tableware to prepare his section of the dining room. The second is another example from the film *The Breakfast Club* in reference to a bag of marijuana. The final also was an overheard term in reference to an old computer model:

"How's it goin'? We need some major plateage?" (5.26)
"So, Ahab … kybo mein doobage?" (Friesen & Meyer 1985). (5.27)
"It's a paleomac." (5.28)

One twist on standard metonymy that makes use of a *prototypical member* for *category* structure is not particularly new, but it may be emerging as a type of renegade figure, as discussed in Chapter 2, given one of its

possible pragmatic effects. Modern usage of this construction may have become more derogatory given raised consciousness about categorizing people based on their national origin and other characteristics, akin to synecdoche. Consider two brief examples of references to Russians from the American movies *Jet Pilot* (1957) and *Stripes* (1981):

> "Hey, Molotov, or whatever your name is" (Furthman 1957). (5.29)
> "They got a hundred Baryshnikovs running around" (Goldberg, Medjuck & Reitman 1981). (5.30)

A last possible emerging figure is based on a kind of *resemblance* between an utterance and referent topic, typically with the utterance component somehow belittling the reference. Figures such as this could be borrowing the general idea of an older form of compound with pseudowords resembling other real words used to deride the meaning of those other words, as in faux Yiddish derogatory responses. For instance, consider comments said to someone advocating the following of rules or expressing concern about good health:

> "Rules schmules" and "Healthy schmealthy." (5.31)

But other constructions apply to entire phrases, as in the following excerpt from the American television show *M*A*S*H*. The speaker is complaining about US Army bureaucracy, its penchant for requiring forms for everything, and the practice of abbreviating words into monosyllables, as in reducing Pacific to "Pac" (emphasis added):

> "In fact, you can't have anything, stroke nothing, which is not approved by Stat Quo Pack, which is enough to make you reach for *air sick bag*" (Gelbart & Marks 1973). (5.32)

"Air sick bag" has a structural resemblance to the kinds of abbreviations being derided (e.g., "Man Sup Req" for "Manual of Supply and Requisition" and "B-E-L" for "Basic Equipment List").

As another more recent example, in response to encouragement from a particular university's central administration that academic departments develop online brochures, a management consultant was brought in to assist with the initial unit "branding." The person recommended short, pithy two-word phrases to frame the main contribution of each area. General phrases were suggested for the institution as a whole, such as "Helping Minds," "Starting Careers," and so on. But the consultant recommended that individual departments craft their own phrases. At a meeting to discuss this, the consultant gave examples for specific disciplines, such as

in "Engineering Excellence," "Building Biology," and "Fostering Fitness." In response to this, a colleague leaned over to me and ironically quipped

> "I've got one for management consulting. How about '*Feeling Ourselves*'?" (5.33)

Figurative Use beyond Language

One last issue to consider in the expandability of figures and their pragmatic effects might be ways to achieve figurativeness and pragmatic effects outside language. None of these are particularly new modes of expression for figurativeness, but they demonstrate that the ways in which figures and their effects can be accomplished are by no means limited to spoken and written language. They also show that innovation might be particularly fruitful in these other media.

Irony and its pragmatic effects can be readily conveyed through essentially any medium of human meaning communication. Speakers can gesture ironically (the obviously pretended smile at someone's lame joke). They can use ironic body posture, as in pretending to be racked with pain at a person's attempted weak insult. Images can be obviously ironic (a picture of a dog urinating on a "No pets allowed in park" sign). Active imagery, as in films, performances, and so on, are wildly flexible and can afford alternative portrayals of irony as well as rich blendings with other figures, as in the shock-irony film short *Set Yourself Free* discussed earlier.

Hyperbole is also highly versatile in fitting into all modes of human communication. A person's gestures can exaggerate (gestures indicating the size of a spider). Body style can overstate the degree to which a person is being attentive. Images can readily include hyperbole (essentially any caricature). Active imagery also can be particularly hyperbolic in new ways, with computer-generated imagery (CGI) capabilities making hyperbolized portrayals appear realistic.

Metaphors are also commonly conveyed with multimodal means, including gesture (e.g., a person pinching his or her nose to indicate that someone's idea *stinks*) and broader expression (e.g., standing or walking *stiffly* to refer to another person's personality). Metaphorical images, static and live, abound as well (e.g., a picture or performance depicting the United States as a heroin addict, clamoring to inject itself with a syringe filled with oil).

What might be a newer development in paralinguistic figurativeness and effect accomplishment is the degree to which layerings of figures and representations is possible. One poignant example is the 2010 film *Exit Through the Giftshop* (Cushing, D'Cruz & Gay-Rees 2010), in which ironies

about images about metaphors about ironies about hyperboles constitute standard fare. As just one example, one segment depicts a large elephant that was painted red and placed on display in a room at a Los Angeles art exhibit for the British artist Banksy. This performance thus was depicting the idiom of *the elephant in the room*, or the large, very obvious thing that people do not talk about. Some local news reports about the show ironically missed the idiom, instead focusing on some protesters who were upset at the animal being painted. The news reporters thus were demonstrating the very idiom that they ironically missed in choosing to focus on the controversy rather than on the show. All of this was, of course, conveyed ironically in that the entire movie is a subtle satirical and ironic commentary on the irony of ironic commentary being taken nonfiguratively.

Whether the preceding listing comprises newly emerging figures, arising figurative mechanisms, or novel pragmatic effects is not always easy to distinguish. Multiple repetitions of a cultural meme, for instance, as in (5.5), do not seem to have the conceptual cohesion of, for instance, metaphor (i.e., discussing/conceptualizing one thing in terms of another). Nor are they merely instances of repetition such as a rhetorical device (e.g., "This cake is yummy, yummy, yummy"), although they have elements of both. They also may have qualities of the somewhat new pragmatic effect discussed earlier, *heightening awareness of something* (see the discussion of the short film *Set Yourself Free* for shock irony), similar to hyperbole's *highlighting discrepancies*, but not necessarily involving the pointing out of *deviance* from expectations.[23] However, repetition or some other kind of alteration, coupled with cultural reference, especially toward something relatively fixed, does seem to be new as a package. This is especially apparent given the ability of technology to *recreate* the cultural icon on the fly rather than a speaker miming, copying, or quoting it.

Indeed, the emerging *at-everyone's-fingertips* ability to find and display diverse cultural content itself (e.g., songs, sound effects, images, clips from film, and advertisements) may be the most likely candidate for a new mechanism of using old figures (e.g., irony) for achieving standard pragmatic effects (e.g., *meaning enhancement*). It may even gain acceptance as a kind of figure itself, perhaps as a "culturenym." Akin to stating a proverb, a person references a cultural icon but does so through technological expression (e.g., playing a song clip or sound effect, showing a video snippet, or displaying an image), which may involve something like *objectivism*.[24] Of course, such a display mechanism still would have to work within the ability of a human mind or minds to recognize and comprehend, involving the usual constraints of information overload, short-term memory, and other

limitations on what can be achieved cognitively. Indeed, these limitations on figurativeness stemming from the capacities of human abilities constitute their own major influence on the potential future of figurative forms. The nature of some of these constraints on pragmatic effect accomplishment is considered next.[25]

LIMITS OF PRAGMATIC EFFECTS

Despite the preceding discussion on the ways in which figurative language and its effects might be expandable, an equal consideration is warranted on possible limits to pragmatic effects. In what ways is figurative language use and its pragmatic effect performance constrained or inhibited either in normal functioning or in potential expansion?

Time

Consider first ways in which constraints related to time might apply to figurative language use and pragmatic effect accomplishment. These range from narrow, in-the-moment constraints to those possibly lifetimes long. They also encompass a within-utterance to beyond-audience range.

Narrow Time Limits

If one considers time constraints that apply *in the moment*, as in the "near-to-online" elaborative inferences discussed in Chapter 2 (rather than online, coherence inferences necessary for comprehension), one can readily see several essential constraints to pragmatic effect accomplishment. As time passes from an utterance's offset, the contextual, emotional, utterance-specific, and aura of lingering processing products and background pragmatic effects all begin to change. They may fade from short-term memory (STM) or be supplanted altogether by contextual, utterance, or other information arising in STM during the continuing stream of processing.

A general human memory analogy is useful to demonstrate this limitation – decay versus interference effects in recall. If people encounter some information and then time passes before its recall is attempted, memory performance will diminish according to readily predictable patterns. One source of diminishment is a quick fading of memory traces from STM. If information is not rehearsed for maintenance in STM nor is encoded into long-term memory (LTM), it fades because STM has limited capacity and finite storage duration. Old information also may be replaced in STM by newer content entering the system. Either *decay* or *interference* processes,

or a combination, will produce a loss of original information in STM fairly quickly.

Applying this principle to the stream of figurative language comprehension and pragmatic effect derivation, as the suite of utterance and background information changes in STM, the opportunity for particular pragmatic effects also fades. Granted, other pragmatic effects arising from the altered information in STM are possible, but the ones sought by a speaker at the time of utterance may become less likely. Essentially, as time passes, interlocutors lose the shared stage on which initially sought-after pragmatic effect accomplishments could happen, but a new stage arises that can afford different pragmatic effects.

As a concrete example, imagine a woman works as a lifeguard at a beach. As she is finishing her shift and putting on her jacket, a friend approaches and asks to borrow her phone. The woman, in responding, suddenly thinks that she may have dropped her phone on the beach and, mildly panicked, pats her jacket pockets. After a few attempts, she happily feels her phone. Meanwhile, the friend, who interpreted the woman's movements as a simple acknowledgment to loan the phone and search for it, says

"Thanks, you're a lifeguard." (5.34)

But the lifeguard does not deeply process the double entendre/metaphor nor its potential pragmatic effect of *ingratiation* (among others, e.g., *humor*), which is initially blocked by her brief distracted moment of concern. A short time later, though, the lifeguard experiences the *ingratiation*, but because the moment of utterance has passed, its intensity is lessened. Because of this, what would have been a subsequent experience of humor is also diminished or is suppressed because the lifeguard feels embarrassed at her brief unwarranted panic. This then reduces the lifeguard's likelihood of participating in a figurative cluster by responding with a bantering rhetorical question/double entendre of her own as she hands over the phone:

"What gave it away?" (5.35)

However, imagine that the lifeguard notices this lost opportunity for fun with her friend, so she becomes more motivated to engage her in the next conversational stage, which might increase her likelihood of producing a playfully provocative *new* figurative utterance with intended pragmatic effects of *humor* and *catylization*:

"I see you're organized like usual!" (5.36)

Broader Time Limits

Time constraints on a broader scale arise if people reconsider figurative utterances at some point significantly later. Imagine the preceding lifeguard, for instance, thinking about her friend's comment (5.34) the next day. Anyone who has had the experience of attempting to relate an earlier comment or event to a person who was not present and fails at either accurately reexperiencing the comment or the event or at conveying the experience as it was lived to the person – a *you-had-to-be-there* moment – knows this phenomenon well. As with the narrower, just-after-the-moment constraint, the context and background milieu of information at the time of the reconsideration or retelling may disenable pragmatic effects that might have happened at the original utterance. But equally, they may afford new ones.

*Tim*ing

Beyond the limits imposed by time *passing* for an utterance and its pragmatic effects, the *timing itself* of utterances and pragmatic effects involves multiple constraints.[26] Comedic timing is one very prevalent example of this and can have an enormous influence on the degree of humor produced by jokes (Norrick 2001). The particular details of comedic and other categories of timing within figurative language and its delivery are complex (see Chapter 4) and, as in other issues, are greatly affected by the particular characteristics of each individual telling (e.g., sometimes it is better to move quickly to a punch line, sometimes more slowly).

Many relevant variables also operate on gradients rather than fixed levels such that even nonoptimal timing decisions still can achieve pragmatic effects, although perhaps not maximally. One previous example makes this point nicely. The character George's ironic response in the Chapter 4 *Seinfeld* example (4.26), "Good for the tuna," operates on a gradient of timing – too immediate and too late of a response by George is less funny and less biting than some optimal, middle-length pause due likely to a maximization of a buildup in the ironic derision pragmatic effects in Jerry's and Elaine's preceding turns. Too soon a response by George would not have allowed their derision to amass, and too late a response would have that derision fading.

Big Time

Perhaps the broadest impact of timing on pragmatic effects involves the proximal/distal time continuum of cultural references used in figurative language. The more distal in time a cultural reference by a figurative expression is, as in a contextual expression or an entire colloquial figure no longer

in use, the more tenuous that expression can be for a user. All else held equal, hearers simply may not recognize it. However, dredging up formerly well-known but now well-forgotten figures or referents can trigger particularly strong mastery display in part because it showcases a speaker's power of observation, insight, and memory. Such a display can especially demonstrate a speaker's cognitive prowess as a function of how far in the past and the more forgotten the referent is. Consider the following excerpt from Jeffrey Eugenides' recent 1980s-based novel, *The Marriage Plot* (2011):

> Her street, when they managed to find it, was a cobblestone relic of medieval Paris. The sidewalk was too narrow to navigate with their packs, so they had to walk in the street, past the toy cars. The name on the bell was "Thierry." Larry pressed it. After a long delay, the lock buzzed. Mitchell, who'd been resting against the door, tumbled into the lobby as it opened. "Walk much?" Larry said.

The final statement by Larry harkens to a once commonly used but now faded colloquial rhetorical question from 1980s American English used to admonish a person's clumsy movements.[27] Hearers familiar with the term but who have not heard it in a long time appreciate the writer's revival of the phrase and its invocation of nostalgia for a past cultural era. They also appreciate the writer's cleverness in doing so.

Shallow and Deep Synchronicity

Given how pragmatic effects are sometimes used to gain social position and to affect that of others, timing constraints relevant to inserting figurative commentary into live, ongoing discourses for maximal effect accomplishment are also important. Finding *an* opening, finding *the right* opening, timing the comment for ideal pragmatic effect, and then continuing with additional timely contributions of pragmatic effects constitute a delicate task that takes time and experience to master. This is especially true when other interlocutors are competing for position, mastery display, attention, face management, and so on and figurative and other linguistic complexity plays a prominent role. Speakers essentially have to worry not only about getting a word in edgewise but also about getting in a pragmatic effect as well.

A deeper layer of timing constraints goes beyond inserting oneself pragmatically into ongoing conversations. Speakers often strategically position themselves for longer-term social impact and engineering. For instance, speakers might use moderate figurative language to enable toeholds on longer-term pragmatic effects. These might be followed by stronger

figurativeness expression later for both positive and negative pragmatic effect accomplishment. For negativity expression, a speaker might chink the armor of a person, as it were, early in a discourse – by both moderately achieving insult and surrounding it with humor (e.g., with lighthearted verbal irony). This step might begin to woo overhearers or lateral interlocutors, enabling more aggressive and less cushioned attacks on the person later (e.g., stronger sarcastic irony) – all to strategically build the speaker's and lower the target's stature.

For positivity expression, addressees may be wary of strong initial praise from a speaker via figurative pragmatic effects or other means, but initial humble expressions of esteem, fondness, and so on may plow the way for later stronger ingratiation. Indeed, given how figurative language and its pragmatic effects can produce broad social engineering, realization of longer-term patterns in interactions affords many strategies well served by pragmatic effects (e.g., aligning, flanking, and heading off). Worrying over these long-term issues can cascade back to decisions about crafting individual figures and leveraging specific pragmatic effects in the moment for further strategic impact longer term.

Audience Size

Figurative and pragmatic timing constraints differ when discourses take place one on one versus in larger groups. In conversational dyads (or small groups), local idiosyncratic interactive issues between the particular interlocutors dictate timing delivery of figurative utterances for achieving pragmatic effects. If talk is crafted for broader and likely more diverse audiences, timing issues may cause figures and their effects to become more caricatured, simpler, and so on to accommodate the wider range of audience abilities.

The nature of the self-awareness of large audiences and its effect on common ground are another difference example. As discussed concerning speech/text technology impacts on pragmatic effects, a speaker excelling at mastery display in front of a crowd, for instance, requires different timing parameters than masterfully talking to a small group (e.g., allowing time for effects to cascade through the crowd and reach desired crescendos). One need only look at powerful presentations to large audiences (e.g., Dr. Martin Luther King's famous "I have a dream" speech) relative to imagining the same speech given in earnest to only two other people to see the differences. Indeed, if the timing patterns for a crowd were attempted on a small audience, the speaker likely would appear grandiose or disengaged.

Multimodal Timing

Chapter 4 briefly discussed issues concerning timing of figurative utterances delivered multimodally (e.g., 4.3). One new issue briefly added here is that of how gestures or other multimodal activities create figurative expressions out of language that otherwise would be nonfigurative and the timing issues involved. Imagine a speaker presenting a new idea to an addressee with the simple nonfigurative statement

"Consider this." (5.37)

If an outstretched hand, palm-up gesture accompanies this statement, as if to present a physical object to the addressee, the expression as a package takes on metaphorical qualities. The gesture invokes the conceptual metaphor *ideas* are *objects*, rendering the demonstrative metaphorical. It also can invoke the motor program of moving an object forward as if passing or offering it to someone.

Little research has addressed timing issues on such mixed-modal delivery, but these issues clearly could affect the strength of the figurative meaning and the resulting pragmatic effects. Imagine, for example, three possibilities: the gesture and utterance coincide, the gesture precedes the utterance in a clear sequence, or the gesture follows the utterance, again with no overlap.[28] One might argue that the last option would carry the strongest meaning because it presents the gestural component in isolation, but also after the disambiguating effect of the utterance. When the utterance and gesture coincide, their parallel meanings are a bit redundant, slightly diminishing each's individual contribution. When they're separated, though, their independent, subtly different meanings become apparent. If the gesture precedes the utterance, its meaning could be ambiguous (i.e., requesting something of the addressee or referring to something behind or to the side of the addressee), but in having the gesture follow the utterance, its meaning is less ambiguous, being anchored by the directive in the comment.

Structure: Hyperbole and Persuasion

The discussion in Chapter 3 concerning general pragmatic effects and those more tightly linked to subset figures repeatedly made the point that figures, although usually performing pragmatic effects under normal conditions, also can backfire. For instance, a speaker's attempt at *mastery display* might go awry, with the speaker ending up appearing desperate or arrogant. *Structural parameters*, or the conditions needed for a desired

pragmatic effect to occur successfully, comprise the next set of limitations to be discussed. Particular attention also will be focused on the parameters for *hyperbole* to effectively perform *persuasion*, by way of illustration, given recent research on this.

Past research has shown that hyperbole is frequently used to *highlight discrepancies* from expectations encountered by a speaker and usually when deviances are negative (Colston & Keller 1998). Indeed, hyperbole is so well equipped at this that even young children are well served by it – children frequently encounter things turning out less than their expectations or desires because of socialization, so they adopt hyperbole early to express this frustration (e.g., "I never get to …" and "We always have to …") (Colston 2007).

If one wants to then ask how well hyperbole might perform *persuasion*, one should look at instances when people have encountered violated expectations, where we know hyperbole is used, but also when people are *motivated to persuade*. In a series of experimental and authentic/observational studies, Colston (2015) evaluated hyperbole's ability to persuade when used by speakers accused of some wrongdoing.

A first experiment manipulated the level of hyperbole fictional speakers used in experimenter-crafted denial responses to accusations of wrongdoing (e.g., "Did you leave the oven on all night?"). Relatively strong hyperbole, defined as having two extreme-case formulations (ECFs) in its construction, was rated as expressing *more* guilt by participants reading the comments as if spoken to them in contexts compared to weak hyperbole, which used only one ECF:

WEAK HYPERBOLE: "I have *never* left the oven on."
STRONG HYPERBOLE: "I have *never*, *ever* left the oven on." (5.38)

Hyperbole in this task thus is negatively correlated with persuasion – the stronger the hyperbole, the less the speakers are believed.

Judgments of *authentic responses* to accusations of wrongdoing by speakers in a separate elicited production study, however, revealed the opposite pattern. Participants considered accusations of wrongdoing similar to those from the experiment (e.g., a person accused of leaving an oven on) and offered what they thought would be genuine responses to those accusations when speakers were either (1) telling the truth (e.g., they *had not* committed the acts) or (2) lying (they *had* committed the acts). Utterances from speakers who had not committed the undesirable acts (e.g., speakers who were innocent) contained naturally occurring stronger hyperbole in their denials compared with utterances from speakers who

had done the acts but were trying to lie their way out of it (e.g., speakers who were guilty).[29] Most interestingly, these authentic responses, when turned around and given to a new group of participants to rate relative innocence or guilt of the speakers, showed the opposite result as the experiment – people who were innocent, who used stronger hyperbole, were rated as more innocent. Guilty people, who used weaker hyperbole, were rated as more guilty. Thus hyperbole seems effective at controlling persuasion *in these relatively authentic constructions* – the stronger it is, the more speakers are believed.

A subsequent experiment similar to the first, however, revealed that if hyperbole is couched within some other figurative form such as verbal irony such that the strong version of hyperbole (e.g., two ECFs) has a reason for existing (i.e., to serve the process of *pretense*), then the finding of the first experiment is reversed – matching the production task results. Strong hyperbole expresses *less* guilt compared with weak hyperbole, again *when embedded within verbal irony*:

WEAK HYPERBOLE, IRONIC:	"Oh sure, I *always* throw lotion on the floor."
STRONG HYPERBOLE, IRONIC:	"Oh sure, I *always* throw lotion *all over* the floor." (5.39)

Here hyperbole *is* controlling persuasion – the stronger the hyperbole, the more participants believe the pleas of innocence of the accused speakers.

Additional deeper analysis of the elicited authentic responses in the production study also revealed that those few responses that bucked the trend of the majority of the data, the examples in which people who were innocent who used *strong* hyperbole but who were thought to be more likely guilty had a characteristic pattern. Those cases often involved a modal and extreme case formulation and then a verb-object combination that poorly fit the rest of the construction. Other items with this same structure but with verb-object relationships that nicely meshed with the constructions followed the pattern in the bulk of the production data – stronger hyperbole indicating innocence and thus being persuasive. For example (verbatim responses, emphases added):

Rated More Likely "Guilty"	Rated More Likely "Innocent"
"I would never copy *another student's work*."	"I would never *cheat on an exam*."

The interpretation of this item analysis was that hyperbole is generally successful at persuasion if it resides stealthily within constructions that align with schemas about human behavior – for instance, "never" doing something *very bad* (cheating on an exam) versus "never" doing something *relatively innocuous* (copying another student's work). The former is better aligned with real human behavior schemas – *people never doing very bad things* is more valid than *people never doing slightly bad things*.

This item-analysis interpretation, along with the results of the juxtaposed experiments, explains how hyperbole persuades. If hyperbole operates within meaning mechanisms (e.g., pretense) that justify its presence, or if it resides stealthily within other structural and propositional characteristics of host utterances (e.g., coheres with *modal ECF verb-object* constructions, is not redundant, etc.), it will be persuasive, at least as a form of denial of accusations. However, if hyperbole seems to have no good reason for inclusion in the denial comment, as in the first experiment, where the strong hyperbole seemed to stand out, it will be taken as an indicator of guilt.[30]

This work has shown that hyperbole has constraints on how well it can achieve certain pragmatic effects such as persuasion. Other figures also show analogous constraints. Aptness, for example, constrains metaphor's ability to *enhance meaning* (Bosco, Vallana & Bucciarelli 2012; Chettih, Durgin & Grodner 2012; Wolff & Gentner 2011). A presence/absence gradient concerning an obvious target constrains verbal irony's success at *expressing negativity* in the form of derision (Bowes & Katz 2011; Campbell & Katz 2012; Ishida & Abe 2010; Lee & Katz 1998). Schematic alignment between the world of human events and the concrete content of a referent vehicle constrains a proverb's ability at *extollation* (e.g., are the consequences of *letting sleeping dogs lie*, in terms of actual canines, analogous to those of not causing a disturbance in human events – e.g., excitement or conflict does not escalate?) (Feldhaus & Honeck 1989). Specific grammatical structures used to package a metonymy, as well as the type of metonymic reference (e.g., object for user, as in "The scalpel was sued for malpractice" [Gibbs 2007]), can constrain its performance of a number of pragmatic effects, including *persuasion*, *efficiency*, *social engineering*, *enhancing meaning*, and others). Indeed, all figures that perform pragmatic effects would exhibit such structural constraints.

The Peak Problem

One last constraint, this time on the expandability of figurativeness and pragmatic effects in general, concerns their having reached a pinnacle

because of limitations in human adoption and use rather than exhaustion of figurative possibilities. Developmental research on production and comprehension of figurative forms shows clearly that adult-level proficiency takes time (see Gibbs & Colston [2012] for a review). Although some figures are produced relatively early in language development/acquisition (e.g., hyperbole) (Colston 2007), most figures do not show until middle childhood or later, on average. Evidence for comprehension also varies by figure, with some occurring later than others. Debates concerning early- versus late-development views are ongoing, and the role and necessity of support processes such as theory of mind, perspective taking, working memory, and world knowledge, many of which are still developing through childhood, are also not fully understood.

It is thus fair to say that the outward appearance of the adult "norm" of figurative use and comprehension, including leveraging and appreciating pragmatic effects across most forms, is not in place in *most* people until mid-childhood to adolescence. For some figures (and people), development continues even into adulthood (e.g., some idioms and proverbs). This is much later than the acquisition of most core linguistic capacities and later than many other pragmatic accomplishments. *Some* people continue to hone and improve their figurative (and other) pragmatic effect skills to higher levels throughout adulthood and later, even pushing boundaries of novelty. These are often the funnier, cleverer, and more socially adroit among us. But not everyone has the skill or wherewithal to do this.

The situation is akin to athletic performance. Many people participate in sports, physical games, and other activities through adolescence and into adult years, but most people who continue beyond early adulthood participate for enjoyment, exercise, personal goals, or other reasons. A rare few continue competitively to surpass the pinnacle of prior human achievement. Among those, even rarer are the breakout athletes who set performance levels far above the peak. Most people instead become involved in too many other things in their adult lives to focus all their efforts on maximizing their athleticism above all others. By the time most people are into their early adult years, they have completed their formal education. They have entered careers or faced other adult responsibilities. They have involved themselves in the complexities of social and intimate relationships, often including parenthood, along with all the other stressors involved in early and later adult life. Many also have encountered much trouble managing all of this.

For the same reason that other pursuits, such as athletics, are not followed with abandon by most adults by this age, especially for the purpose

of pushing boundaries beyond all earlier human performance, neither is figurative inventiveness. When it *is* pursued at the highest level, in the cleverest of writers, artists, scholars, speakers, entertainers, and other people who practice it more quietly, a novel structure or technique does on occasion stand out, get noticed, attract appreciation, and become adopted. But it also may be too complicated for mass appeal and indeed sometimes attract resentment by people with more immediate concerns. All these influences thus may act as a sort of rein on communicative expansion, a principle in the human experience that is not unique to figurativeness by any means.

6

Conclusion: Meaning Happens, by Hook or by Crook

Imagine that you have just finished watching a new film at a multiscreen cinema and you are now standing outside the cinema lavatories by a drinking fountain, waiting for your movie companion to rejoin you. Another person, a man you do not know, is standing nearby, appearing also to be waiting for someone. After a moment, the man nonchalantly turns to you and says the following with an earnest expression and then awaits your response:

"Perrier doesn't really work on the yellow stove." (6.1)

What would your response be? Casual unscientific inquiry of a number of friends and colleagues revealed a consistent set of potentially overlapping possibilities (ranging from more to less polite): noted complete confusion and a polite request for clarification (e.g., "Excuse me?"); hypothesis about having misheard the person (e.g., "I'm sorry, what?"); hypothesis that the person has a mental dysfunction or illness but is nonthreatening or is just being silly, a neutral response (e.g., "I'm sure it doesn't"); hypothesis that the person is mentally ill, drugged, or very strange and *is* possibly threatening, a wary response (e.g., "Uh, sure" or silence and moving away); frustration and impatience that the person is not making any sense, an aggressive response (e.g., "What are you talking about?" or "What?!"); or outright dismissal, an exasperated, bored expression (e.g., "Whatever you say, dude").

A few responses mentioned slightly richer interpretations: hypothesis that the person must be making some kind of a private key reference to the film he just saw and mistaking you as having seen the same movie (e.g., "Are you referring to something in a movie?") or hypothesis that the comment actually makes sense but you're missing something (e.g., "Um, what? I don't understand"). Other possible thoughts not rising to full hypotheses were something to do with the occasional use of club soda to treat a spill or stain;

something regarding cleaning a stove, perhaps with Perrier; something concerning Perrier being sophisticated and an old yellow stove appearing trashy; and even something to do with lavatories, water, and the color yellow, leaving details to the imagination.

The point of this example is that even in the case of seemingly meaningless language use, people still can derive a range of meaningful hypotheses, ideas, suspicions, emotional reactions, meta-awarnesses (e.g., knowledge of the multiple hypotheses available and uncertainty of their relative truthfulness), and attitudes (e.g., strongly disliking the speaker) to which they can readily respond linguistically and behaviorally even if they are not sure what is going on. Indeed, an example such as this that *does* provide low-level basic comprehensibility for the hearer – the speaker uses a language known by the addressee, the lexical items are familiar, the utterance is syntactically viable, and the bottom-up semantics are derivable but is devoid of top-down semantic, contextual, or pragmatic sensibility – is illustrative of the functioning of pragmatic effects.[1] Removing the typical perch on which top-down semantic and pragmatic processes are normally anchored reveals some of their usually transparent functioning – handling addressee questions such as "What is the utterance about?" "What new information is it providing?" "What does it have to do with me as addressee?" What is the nature of the relationship between the speaker and I before and now after the utterance has occurred?" "What are the broader ramifications of all of this?" and "How do I feel about it?"

Answers to these question for normal sensible utterances seem part and parcel of language comprehension and often can escape notice. In nonsensical situations, however, they stand more apparent. By way of comparison, imagine the same person instead having said to you

"Popcorn doesn't really work on a big appetite." (6.2)

Here the utterance is about a common movie snack. The speaker is indicating that he is not sated by eating that snack – essentially to make small talk with someone to perhaps moderately commiserate as they both stand in silence obviously waiting for other people and perhaps anticipating a meal. The interlocutors' relationship changes only slightly by virtue of the utterance – they are perhaps a little more intimate than before (they are at least chatting), partaking in a standard form of phatic communion. But the ramifications are not profound, the interlocutors are maybe a bit more relaxed, but no major obligations are on anyone to interact further, save maybe a brief phatic retort in kind (e.g., "Yeah, the stuff's not very filling") and maybe the briefest of farewells (a simple nod suffices). The

addressee also would likely feel at ease about all this. Even if he does not prefer small talk, it is at least common in such situations and indeed can smooth interaction away from an otherwise possibly awkward silence. The addressee also could have experienced much of this without explicitly registering it.

WHAT IS ENTAILED BY A SEARCH FOR MEANING?

The pragmatically contextually nonsensical example (6.1) thus brings to the fore important issues involved in a search for meaning. Lower-level instances of nonsensicality often can be resolved if pragmatic-contextual structures and practices are in place – the momentum of knowing what a person is doing broadly in an utterance often can carry a lexical, syntactical, or other lower ambiguity (e.g., a person eating next to you in a diner mumbles something mostly unintelligible except for the word "salt" as they look at you and the salt shaker in front of you with an inquiring expression, "Could you please pass the salt?").[2] But missing pragmatic, contextual, or broad semantic cues often have no surrogates, making them a core factor in the search for meaning.

Situations of pragmatic nonsensicality such as the preceding one perhaps do, though, go beyond the mere *unshrouding of normal* presence and functioning of top-down sematic and pragmatic processes. An utterance bereft of information to enable these processes likely would boost the functioning of the processes in a hearer in an attempt to salvage some kind of overall meaning in a speaker's comments. Nonsensical utterances, however, also serve this revealing function nonetheless. Note how the obviousness of an interpretation of the emotional or other psychological states of the speaker, as well as the relationship between the interlocutors, differs between nonsensical (6.1) and sensible utterances (6.2). In the sensible case, these assessments seem almost nonexistent in their commonality and normality – the speaker is friendly, if a bit cheeky, and a normal level of camaraderie exists between the interlocutors, even if the hearer does not like small talk. In the nonsensical case, the interpretations may be a bit overwrought, but their presence is more apparent notwithstanding – the speaker is pragmatically challenged at least and possibly dysfunctional or threatening, and the interlocutor relationship is strained minimally or broken outright. One could argue that the lack of resolution of these assessments is largely what makes pragmatic processes visible in the nonsensical case rather than their amped functioning.

Reconsidering the themes of this book introduced in Chapter 1 in light of this core function of pragmatics in the search for meaning, we can now

treat the necessity of reevaluating current models of figurative (and other) language processing/understanding/interpretation. The two themes most relevant for this discussion are the importance of greater inclusion of psychological phenomena into consideration of figurative use/comprehension models and a parallel concern that the full range of rich social aspects of human interaction also needs inclusion in figurative use and comprehension accounts. The need to attend to broader discourse contexts in explicating what is more and less figurative and how comprehension follows accordingly and the use of sophisticated statistical modeling approaches in assessing the broad range of factors that affect figurative cognition are considered afterward.[3]

Psychology and Pragmatics

An enormous amount of work in cognitive and social psychology has demonstrated that no instance of cognition occurs as an island, completely independent and isolated from other bits of cognition (Amit, Algom & Trope 2009; Bar-Anan, Liberman & Trope 2006; Burns, Caruso & Bartels 2012; Caruso & Shafir 2006; Caruso, Gilbert & Wilson 2008; Caruso, Waytz & Epley 2010; Cokely & Feltz 2009; Epley, Caruso & Bazerman 2006; Fausey & Boroditsky 2010; Fausey & Matlock 2011; Maglio & Trope 2012; Trope & Liberman 2010; Uttich & Lombrozo 2010). People's on-the-fly cognition is influenced by other recent cognition(s), things the person is worrying about, even people's physiological state. Indeed, a great deal of recent and older work has shown just how powerful these influences are. People can be influenced in their person perception by the temperature of a cup they are holding (Williams & Bargh 2008). People's interpretations of metaphors can be affected by the nature and direction of movement their body is experiencing (Boroditsky and Ramscar 2002; Wilson & Gibbs 2007). People's memories of past events can be altered by the descriptions of those events in the present (Loftus 1975, 1993, 2003; Loftus, Miller & Burns 1978).

None of this is necessarily a new observation. What is potentially new, however, is the growing recognition that processes that underlie the preceding influences and many, many others can be very fast, automatic to a degree, can be triggered in parallel by online language comprehension or things that accompany or even precede it, and indeed can *leak in* to affect that processing, even at very early stages. This may be the case particularly for figurative language processing, where one could argue that the invoking of rich comprehension mechanisms through an enhanced search for meaning can and would readily absorb automatic and fast cognitive operations.

Consider two examples: the influence of contrast effects in verbal irony and anchoring effects in hyperbole. These two figures and their performance of standard pragmatic effects first will be outlined in terms according to prominent accounts of the figures' comprehension (see also Chapter 3). They will next be couched in relevance-theoretic terms, to use just one processing model as an example.[4] Finally, both figures will be described via influences of fast, basic, and semiautomatic processes of contrast and anchoring effects.

Psycholinguistic Meaning

As discussed earlier, several prominent accounts of verbal irony have been proposed and supported with evidence. Among these are pretense and echoic accounts (mention and reminder in the latter). According to the pretense account (Clark & Gerrig 1984), speakers using sarcasm or some other kind of verbal irony are essentially acting. They portray another person espousing the statement being made, but they do so typically with derogatory or belittling portrayals such that they cast their character in a negative light. For example, a person saying "Scrummy" or "Yummy" about a horrible-tasting piece of candy would be pretending to be a fool who actually would like bitter, poorly textured, and foul-smelling candy and would demonstrate that person's foolishness accordingly. This belittling portrayal then casts a negative projection onto the target topic, rendering *it* more negative as well – hence the expressing-negativity pragmatic effect discussed previously as prominent for verbal irony.

The echoic mechanisms achieve expressions of negativity more through the direct demonstration of the falsity of some uttered proposition either as an echo of another person's actual previous remark or as a reminder of a generally held expectation, desire, preference, or social norm (Wilson & Sperber 1992). This mechanism does not require transparent acting but rather a mere statement of something that is demonstrably untrue to cast that statement negatively – it is negative for *being* obviously untrue and for being different from desires or preferences and especially so if the statement were an outright prediction or highly expected event or status shown to be untrue. Here again, negativity is cast on the referent target.

A great deal of empirical evidence and anecdotal experience demonstrate that these mechanisms have validity (see Gibbs & Colston [2007] for a review). Pretense and echoic processes seem very much a part of many instances of verbal irony and can account in multiple ways for why verbal irony expresses negativity, among the other pragmatic effects the figure typically accomplishes.

A parallel example is provided by hyperbole and the pragmatic effects it can achieve – enhancing meaning through altering the perception of target events, topics, or magnitudes, as well as highlighting discrepancies and expressing negativity. According to the inflation account of hyperbole (Colston 2007), a speaker encounters some event or situation that fails to meet his or her expectations. Something about the event/situation is of greater or lesser magnitude than is normal or that is somehow different relative to explicit expectations in the current context. A speaker wishes to point out this discrepancy to hearers, so an attempt is made to render the violation more prominent. A basic psychological principle holds that, all else being equal, things that are larger, physically or semantically, are more noticeable relative to smaller things. Thus the speaker inflates the magnitude of the discrepancy between expectations and reality by speaking as if it is bigger that it is – by stating the target magnitude in terms that exceed its actual levels – and typically in a direction consistent with the violation (e.g., uttered magnitudes are increased if violations are more than expectations but decreased if violations are less than expectations).

For instance, consider the following authentic comment overheard by a former colleague arriving late at a faculty meeting at a university in Wisconsin, which, like many universities, has inadequate automobile parking:

"Sorry I'm late. I had to park in Minnesota." (6.3)

Here the distance between the central campus building holding the meeting and the available perimeter parking exceeded what the speaker expected, preferred, or desired. The speaker draws attention to this discrepancy by making that magnitude larger than it actually is (e.g., if the person had to park a quarter-mile away, she says that she had to park hundreds of miles away).[5]

Or, for lesser-than-expected magnitudes, consider the following comments overheard in a conversation between two university students sharing a laptop at a campus food court:

"I never get to watch what I want."
"You never let me do what I want."
"You never once listen to me." (6.4)

Here the number of times the speaker gets to do or watch what she wants is less than she expects, prefers, or desires. Attention is drawn to this discrepancy by stating those magnitudes as even less than they are in actuality.

In terms of the pragmatic effects of hyperbole, one argument has held that the motivation for pointing out such discrepancies between expectations and reality is that most usages of hyperbole reveal things turning out more negatively than expected, and speakers wish to express their displeasure at this (Colston 2007). On other occasions, things might result better than expected, and here a speaker may feel motivated to express positive emotions. Either way, though, the primary idea is to point out a discrepancy between expectations and reality because such deviations themselves are noteworthy. Showing a hearer that something has turned out worse than expected, less than expected, or slower than expected or better/more/faster than expected also then can alter the person's perception of those things away from what their standard interpretation might have been based on a schema, past experience, or other judgment source. A hearer encountering hyperbole thus likely would alter his or her comprehension of the actual magnitude being discussed to account for the expression of a deviance from expectations of a particular sort, often in a negative direction. Thus a person hearing a hyberbolic remark about the cost of something being greater than expected (e.g., "This shirt costs a hundred dollars!") would believe *first* that the shirt actually costs more (e.g., $40) than it normally would (e.g., $20) *and* that this outcome is a deviation from normality and *finally* that the speaker is not happy about it.

Empirical evidence and anecdotal experience also demonstrate the validity of this hyperbole mechanism. Inflations of expectation violation usually occur when events turn out unexpectedly negative, accounting in part for why hyperbole often expresses negativity (Colston 2007). They also typically align with the directions of the violations, as in something turning out *more* than expected being described as *very much more* than expected. They finally have been shown to express a speaker's surprise at the unexpected turn of events (Colston 2007; Colston & Keller 1998).

Linguistic Pragmatic Meaning

One also can nicely present sarcasm/verbal irony and hyperbole processing in relevance-theoretic terms because this account very neatly explicates licensed systematic inferences of bits of meaning to warrant the effort in making those inferences (i.e., the added meaningful *bang* for the processing *buck*; see Chapter 2 for a fuller description of the account, particularly *optimal relevance*). As a brief recap, positive cognitive effects involve those extra bits of inferred meaning along with normal confirmations or disconfirmations of contextual assumptions. Thus in a situation in which a person uses sarcasm in response to another person's question, we can highlight

both positive cognitive effects and contextual assumptions, the latter as confirmed or not. Consider the following (pretense is treated first, echoic accounts next, and then hyperbole follows):

> A person living in Chicago is hosting an old friend visiting from another country. The two decide to go to a neighborhood restaurant for dinner. The guest has been trying to lose weight, but the host forgets this for a moment and decides to introduce the guest to deep-dish pizza, which the other person has never tried. They order, and some time later the waiter brings and then plates two huge thick slabs of cheese, meat, and bread covered in sauce. As the guest looks at her thick slice, the host asks what she thinks. The guest replies in a flippant tone,
>
> "Sure looks light and healthy!" (6.5)

According to relevance theory, a number of contextual assumptions are likely in place at the end of the host's inquiry about the meal. First, given how questions require responses, a response is expected. Given that the host forgot about the guest's dietary wishes and is hoping to have picked a dish that the guest will enjoy, a positive response is also expected or at least is desired/preferred. These contextual assumptions, presented in brackets, along with the utterance itself then set up possible positive cognitive effects:

> Contextual assumptions: [a response is expected] + [a positive response is expected] + "light and healthy" = Positive cognitive effects (pretense; see italics):
>
> - Confirmation of the contextual assumption [a response is expected].
> - The speaker thinks that the dish is heavy and unhealthy.
> - *The speaker expresses this attitude by pretending to find the dish laudably light and healthy.*
> - *The portrayal of someone espousing the dish's lightness and healthiness belittlingly characterizes that person/perspective given that the dish is obviously* not *light and healthy.*
> - *The speaker intends the addressee to recognize the pretense.*
> - *This renders the dish negatively.*
> - The dish is *more* heavy and unhealthy.
> - Disconfirmation of the contextual assumption [a positive response is expected].

Or, for the echoic accounts (mention and reminder collapsed for brevity; see italics):

> Positive cognitive effects (echoic mention/reminder; see italics):

- Confirmation of the contextual assumption [a response is expected].
- The speaker thinks that the dish is heavy and unhealthy.
- *The speaker expresses this attitude by explicitly* mentioning *another real or hypothetical person's positive commentary about light and healthy foodstuffs* (reminding *the hearer of the positive social expectation/desire/preference to eat light and healthy foodstuffs*).
- *The* mention (reminder) *of that positive perspective is to demonstrate its patent inaccuracy given that the dish under consideration is obviously* not *light and healthy.*
- *This renders the dish negatively.*
- The dish is *more* heavy and unhealthy.
- Disconfirmation of the contextual assumption [a positive response is expected].

Now consider a relevance-theoretic treatment of a standard instance of hyperbole:

> A domestic couple has recently moved into an old house. As with many older houses, a number of problems have arisen with which the couple has struggled. But they had been assured by the realtor that the air conditioning is in good working order. On the first day of forecasted hot weather, the couple sets the thermostat to a reasonably cool setting and then leaves for their separate places of employment. That afternoon, one of them leaves work a little early, arrives at the house, and just as she is approaching the front door, her partner phones. As the person is opening the door, her partner asks about the house's indoor temperature. After the person enters, she says one of the following (as appropriate):
>
> "It's 140 degrees in here!" (Fahrenheit) or "It's 60 degrees in here!" (Celsius). (6.6)

As for verbal irony, relevance theory applied to hyperbole posits a number of contextual assumptions being in place at the end of the partner's inquiry. First, questions require responses, so a response is expected. Also, given that the air conditioning was supposed to work, a positive response about the house's temperature (e.g., "Cool") is also expected or at least is desired/preferred. These contextual assumptions, again presented in brackets, along with the utterance set up possible positive cognitive effects:

> Contextual assumptions: [a response is expected] + [a positive response about the house being cool is expected] + "It's 140 degrees in here!" = or "It's 60 degrees in here!" = positive cognitive effects (inflation; see italics):
>
> - Confirmation of the contextual assumption [a response is expected].
> - The speaker thinks that the temperature in the house is hot.

- The speaker expected the temperature in the house to be cool.
- *The speaker inflates this violation of expectations to draw attention to it.*
- *The speaker drawing attention to the violation*
  - *Alters the default interpretation of the house's indoor temperature (toward hotter),*
  - *Highlights the discrepancy, and*
  - *Expresses the negativity of the discrepancy.*
- *This renders the house temperature hotter, unexpected, and negative.*
- The house temperature is *more* hot, unexpected, and negative.
- Disconfirmation of the contextual assumption [a positive response about the house being cool is expected].

As one can readily see, relevance theory supplies an elegant mechanism for delineating the specific parts of both the verbal irony and hyperbole mechanisms for expressing negativity, highlighting discrepancies, and enhancing meaning – pretense and echo for verbal irony and inflation for hyperbole.[6]

But it is not clear whether relevance theory supplies the most *parsimonious* way of accounting for these parts. Could it be more economical cognitively to consider other means by which some pragmatic effects might be effectuated or assisted in their performance, ways that involve fast and near-automatic processes already present in mental functioning from sensory through cognitive levels? These ways might get triggered during or prior to figurative language comprehension rather than as explicit meaningful stepwise computations in language processing. Consider now contrast and anchoring effects.

Cognitive Psychological Meaning

An additional mechanism also frequently may affect the negativity of verbal irony, may underlie part of the pretense and echoic mechanisms themselves, and in some cases may carry verbal irony's negativity all on its own. This is the *contrast effect mechanism*, which has been argued to serve as a fundamental component of verbal irony comprehension (Colston 2000b). The importance for purposes here is the ubiquity of contrast effects in cognitive and other areas of psychology, their basis in low-level sensory and cognitive operations, their speed and robustness, and their ability to cut across other cognitive functions.

Contrast effects arise essentially when any two things are considered in proximity, with one thing being the background to the other's foreground

(physically or semantically) and the things differing along some relevant continuum (e.g., a physical characteristic [brightness] or semantic quality [polarity]). If the shade of a color swatch, for example, is visually judged with a light background, perhaps a wall, the swatch will appear darker; if it is judged with a darker backdrop, the swatch will appear brighter. If a person's level of aggressiveness[7] is judged amid a background consideration of real and fictional human villains (e.g., Adolf Hitler, Count Dracula, and Hannibal Lecter), the target person will appear less aggressive; if the target person's level of aggressiveness is judged amid a nicer cadre (e.g., Mahatma Gandhi, Mother Teresa, and Santa Claus), the person will appear meaner. Our perceptions of target referents are directly influenced by peripheral referents (spatially or temporally), again, both physically and semantically, without requiring any special consideration of the nature of the foreground or background items per se. Contrast effects in perception, for instance, occur rapidly and with little cognitive control – for instance, the swatch brightness shift will occur (and, indeed, is difficult to stop) without any consideration needed of the concept of a swatch, the color green, a piece of cardboard, or a wall.

Given that many instances of verbal irony display just such a foreground-background juxtaposition, aligned with target situations and ironized commentary, respectively, they also might readily invoke such contrasting shifts in perception (e.g., a bad situation looks worse in light of backgrounding positive commentary – "Nice job," said about a failed attempt to get a simple piece of equipment to work). Moreover, given the prevalence of sarcasm as a prototype of verbal irony, with positive commentary offered about negative situations, the contrasting perceptual shift will predominantly be toward the negative – hence the negativity-expression pragmatic effect, a hallmark of verbal irony. These perceptual shifts are based in sensation/perception, also can occur rapidly, and occur with little cognitive control – for instance, the negative shift about the failed equipment operation will happen (and, indeed, is difficult to stop) without any deep consideration needed of the concept of mechanical equipment, how it operates, mechanical skills, and operation manuals. Take something perceivable as generally bad, juxtapose it with commentary saying that it was "good," and the shift occurs.[8]

As with irony, an additional mechanism also may affect hyperbole's pragmatic effects, may underlie part of the inflation mechanism itself, and in some instances may carry hyperbole's enhanced meaning, discrepancy highlighting, and negativity all on its own. This is the *anchoring effect mechanism*. Anchoring effects arise essentially when any quantity or magnitude

is considered or estimated after having first explicitly processed another biasing quantity/magnitude that shares a relevant dimension with the target quantity/magnitude (e.g., distance). If the biasing magnitude is significantly larger or smaller than the target magnitude, it can anchor people's thinking such that estimates of the target magnitude are drawn toward or *anchored* on the biasing magnitude (Jacowitz & Kahneman 1995; Lovie 1985; Wilson et al. 1996).

For example, a person is asked to estimate the distance in miles from New York City to London – a distance magnitude he has a vague sense of but is neither completely ignorant nor precisely knowledgeable about. Before offering his estimate, though, he first is asked to decide if that distance is more or less than 20,000 miles. What typically happens is that a person in this situation who answers the biasing question correctly gives reliably *longer* distance estimates than a comparable person who makes the estimation alone – without the biasing question being presented and answered initially.[9]

As with irony, our perceptions of target referents are directly influenced by peripheral (i.e., preceding) biasing referents, again, both physically and semantically. Given that many instances of hyperbole display just this kind of biasing referent-target juxtaposition, aligned with hyperbolized commentary and target situations, respectively, they also may invoke such anchored shifts in perception (e.g., a moderate magnitude is thought to be bigger after having first accessed a prebiasing enormous quantity – "That trip must have been a thousand miles long," said about an approximately ninety-mile voyage, which is resultingly perceived as well over a hundred miles in length).

Anchoring effects are based on the malleability of human memory, also occur rapidly and without requiring much cognitive control, and could readily account for some of hyperbole's pragmatic effects. The shift toward the hyperbolic mentioned magnitude (biasing quantity) results in the altered perception of the target magnitude. That this new perceived magnitude is different from preferences could be considered a negative deviation from expectancies.[10]

This is not to say that the intricate and insightful linguistic pragmatic mechanisms involved in verbal irony (pretense/echo) or hyperbole (inflation) are invalid or do not commonly occur, nor that their presentation through the explicit delineation provided by relevance theory is somehow not how comprehension works. One can easily imagine many instances in which some or all those mechanisms are worked through as positive cognitive effects in a given utterance comprehension. However, one can equally

envision instances in which the rapid and somewhat automatic contrast and anchoring effects underlie or even undertow the pretense, echo, inflation, and relevance-theoretic mechanisms, especially for standard-magnitude hyperboles and sarcastic ironies.

This is also not to say that the rapidity and semiautomaticity of low-level cognitive phenomena such as contrast and anchoring effects make them a deterministic factor in the final pragmatic effect outcome of comprehension of verbal irony or hyperbole. Many other factors are at play in parallel, including pretense, echo, and inflation, along with other pragmatic effect mechanisms, some in competition. Many other idiosyncratic characteristics of the discourse contexts in which the figures are used are also in operation. But that such psychological influences are there and can *leak into* early and later processing and affect the outcome is easily demonstrable, and explanations of figurative language processing and comprehension accordingly need to account for them.

One additional caveat about low-level cognitive phenomena affecting language processing is the range of parameters around such phenomena and their requirements for the phenomena to occur. Anchoring effects, for instance, will only happen within a range of magnitude differences between a target event and a stated magnitude. If the stated magnitude is not deviant or explicit enough to provide a strong anchor, no effect will be found. Similarly for contrast effects, the amount of deviance between the target event and a stated polarity (e.g., a slightly bad thing and a moderately positive comment) and the placement of both entities along the full polarity continuum also affect the likelihood and strength of context effects.

Other related biasing effects also possibly can influence pragmatic effect derivation, some of which might corroborate, compete with, or supplant anchoring or contrast effects. Assimilation effects, for example, can occur when only minor differences are found between events and descriptions (Colston 2002a; Newman & Uleman 1990). These effects can operate in the opposite direction as contrast effects, biasing a perceived event toward rather than away from the comment.[11] But the point nonetheless holds that provided certain parameter requirements are met, these and other effects can play a significant role in comprehension and pragmatic effect computation and might do so semi-independently from language processing proper.

In addition to these lower cognitive phenomena influencing figurative language cognition, one also can envision higher cognitive operations playing a major role – consider *schematized* versions of hyperbolic or ironic comprehension. Such schemas could be built from recurring

rhythms in a relevance-theoretic delineation of pretense, echo, or inflation or from standard patterns in anchoring and contrast effects. Schemas such as this also could undercut stepwise positive cognitive effect processing and deliver whole "sarcasm" or "hyperbole" verdicts along with their pragmatic effects, almost immediately after a few key indicators are cursorily processed.[12]

Once one begins to consider higher-level cognitive operations and how they also might leak into and affect figurative language processing, a large number of influences become contenders for inclusion in language cognition models. Some of these are cognitive, such as schema formation and activation. Others include the long list of memory considerations discussed in Chapter 4 as affecting common ground in language production and comprehension – these can readily be expanded for their involvement in pragmatic effect computations and even lower-level language processing. Still other cognitive influences can be found in a wide range of phenomena, including prototype and exemplar accounts of categorization, descriptive as opposed to normative, reasoning and problem-solving explanations, and rule-of-thumb and other cognitive heuristics. Interestingly, accounts such as these also increasingly fold in mechanisms based on emotion, embodiment, and other grounded behavioral phenomena such as physicality, emotion, and social interaction and how they influence, for instance, moral reasoning (Caruso & Gino 2011; Epley & Caruso 2004; Graham, Haidt & Nosek 2009; Greene et al. 2001; Haidt 2001; Hamlin, Wynn & Bloom 2007; Helzer & Pizarro 2011; Inbar, Pizarro & Bloom 2009; Inbar et al. 2009; Schnall et al. 2008; Wheatley & Haidt 2005; Zhong & Liljenquist 2006). Indeed, once one broaches sociocognitive phenomena, a plethora of broad influences on lower-level processing is revealed. These influences span the realm of social cognition and social psychology at large and can be readily applied to figurative language use and processing. These are considered next.

Figurative Language as a Complex Social Phenomenon

Broad social effects on lower-level processing are frequent and diverse. They also bolster the argument about cognitive intermixing – no one instance of cognition (social cognition, cognition alone, or other) is unaffected by others. One could, though, counter the argument that *cognitive* psychological processes (i.e., the contrast, anchoring, and related effects) can *leak in* and affect early figurative language processes, with the claim that *some* degree of linguistic processing still would have to have occurred before such leaking

effects could arise – a hearer would at least need to have recognized the word "nice," for instance, as used sarcastically in

"Nice job" (said about a person's obvious failure), (6.7)

for a contrast effect to take place – or so the argument goes. This is a fair criticism and not without merit. Indeed, sometimes this likely does describe accurately what occurs in figurative comprehension. But the argument can be countered, at least for some instances. Social effects also may further undermine it.

As a counter-counterargument, consider that the stage for figurative comprehension can be so ready set in some instances of figurative use that a sarcastic interpretation of "Nice" as in (6.7) may already be primed. As such, the word's identification need not separately and cleanly (i.e., nonfiguratively) occur either in principle or to enable a contrast effect.[13] Put differently, the fact that a target person has failed at something may be apparent before the onset of the utterance. The additional fact that such a failure is a deviation from desires, expectations, and norms, all of which are *nice* things, is also at hand. Thus the actual situation can already be perceived as *not nice*. Criticism also may be warranted or expected outright in the situation. The hearer even may share ahead of time the disappointment and frustration over the target person's failure about to be expressed by the speaker. That speakers run a gauntlet of pragmatic challenges, as delineated in Chapter 3 (i.e., express one's negativity, but not too harshly, and do not alienate overhearers, try to maximize face issues, but do not put yourself in an unduly weak position, but allow targets of criticism an out so they might be motivated to correct future behavior, but ensure that the criticism nonetheless registers) is also at least implicitly recognized by hearers.[14] Idiosyncratic characteristics of the situation and interlocutors are also available (e.g., that the speaker is outspoken and frequently uses sarcasm). All these might be at the disposal of a hearer even before the utterance is spoken. A statement of verbal irony also may provide the best all-around fit to all these premeanings, constraints, and so on. Thus a clean, devoid-of-context nonfigurative interpretation of "Nice," when used sarcastically with all the supporting information earlier, simply may not occur. Or it may not occur fully prior to a contrast effect getting initiated. The concept of *nice* already might be present in the ongoing processing, prior to the word being said, as something that the current situation *should be but is not*. Indeed, if the schematic idea of verbal irony processing discussed earlier is a viable explanation of some

irony comprehension, then contrast effects could occur simultaneously or even prior to lexical processing as part of the upscaling activation of the verbal irony schema.

When it comes to social phenomena, such stage settings and priming possibilities and momenta are even more pronounced (Forgas & Williams 2001). Many social interaction mechanisms are evolutionarily old, preceding the development of full-blown modern human language. They can operate as parallel human-interaction systems at once independent from but interacting with language, multimodality, facial expressions, and all other prosodic, metalinguistic, and related communicative systems.[15]

Social Groups

Consider first the extent and depth of the social aspect of human communication. All primates, by and large, live in complex social group systems. Such tendencies toward grouping exist in many animal species, pushed evolutionarily by its different advantages (e.g., groups can counteract predation more successfully than individuals, group communication can expand the sensory reach of individuals, and groups enable individuals to share the cognitive gains of other members provided that they have the appropriate learning, memory, and communication capacities). With the highly developed sensory, cognitive, emotional, complex motor, and other capacities of primates, though, this grouping causes unique challenges.

A large portion of the interaction between individuals within and between these primate groups is heated competition. The combination of their close proximity due to grouping, their hyperfunctioning, and limited resources – both species external (e.g., food, water, and shelter) and species internal (e.g., access to mates, social dominance, etc.) – almost inevitably produces social tensions. These tensions need a mechanism of counterweight in order for the social groups to continue. One result is a complex social hierarchy resulting in more diluted or at least distributed competition.[16] Not all individuals will be in continuous conflict with all others over the same sets of things. Rather, some individuals will rise above the others socially. Competition within subgroups will then occur over just a subset of resources. Those at the bottom scrabble over mostly the dregs of resources (e.g., the lesser-quality food, locations, etc.). Those at the top squabble over the spoils (e.g., the best food, mates, leadership positions, etc.). Those at the bottom strive for better position nearer the top. Some make it, and others die or leave the group. Those at the top reign for a while and then are overthrown and discarded, and the system, fair or not, continues. Navigation of these hierarchies thus is a never-ending and very serious business for

the individuals involved. Participation and success raise one's position in the hierarchy, with all the advantages of resource access involved. Lack of participation and failure usually result in ostracism and, ultimately, death (Williams 2001).

Other adaptations to increased social tension in groups involve things such as elaborate facial musculature for display and cognitive capacities to visually recognize intentional and emotional states. A parallel system often exists for auditory communication, with both production and comprehension adaptations. Greater levels and speeds of vocal, behavioral, visual, and other (e.g., olfactory) information exchange also develop. These "hotline" communication systems enable more subtle, nuanced, and rapid information exchange to ideally avert hostilities.[17] Some of these communication media also exist in less social animals (e.g., dominance, threat, and submission displays), but they are more complex and dynamic in social species because they must differentiate more extensively between in-species and out-species applications, as well as among different levels within the social hierarchy. Other physical maintenance processes also get usurped to offset the negative affectual social tension in primate groups, such as social grooming and nonreproductive sexual activity. These processes, along with soothing vocalizations, affection display/receptivity, and other bonding mechanisms, can aid group cohesion through their shared pleasurable experience.

A hallmark of *human* social interaction is the ability to further dampen some of this competition with counteracting mechanisms that afford much greater cooperation, leading to an increase in the gains of group life. That we are still very much competitive, selfish, and violent and that other primates also have socially cohesive processes (e.g., grooming, as mentioned, along with empathy and altruism) go without saying, but humans have evolved and developed considerably more elaborate cooperative social capacities. Indeed, the coexistence and conflict between these opposing tendencies in humans of cooperation and competition account for a large part of the human condition. It affects our philosophies, social rules and expectations, economies, cultural values, institutions, taboos, sexuality, gender roles, politics, aesthetics, disorders, ethnic relations and conflicts, and essentially every aspect of human history and current life. These adaptations in humans involve even more complicated sociocognitive monitoring, display, and negotiation systems, along with emotional empathic and altruistic processes, as well as far more complex communication through language, gesture, and other para- and metalinguistic means.

Sociocognitive Mechanisms

Both competitive and cooperative mechanisms of human social interaction require elaborate communication between individuals. The more socially cohesive ones in particular benefit from nuanced communication that streamlines the alignment of complex cognitive states *even if those alignments are partially illusional* (e.g., lies, ostensible speech acts, and others). Both kinds of systems supply alternate routes for meaning to be exchanged in interlocutors that can supplant, precede, parallel, or interact with linguistic communication. Indeed, we are so finely tuned to the states of individuals around us, through face perception, emotion tuning, and other means, that social variables can have powerful effects on extremely fast cognitive processes at very fine-tuned levels of neural functioning (see later).

Many human social interaction phenomena operate among people to rapidly convey, often beyond the individual's control, varieties of information about internal states to other people. We equally have systems to detect and process these signals. We have indeed evolved such rapid and automatic signaling and detection of this information that we often even overread or overinfer it – apparently a slight personal advantage exists for an individual to make rapid and semiautomatic decisions about sorting others into different categories based on personality, skills, and intelligence, even if those judgments are not correct – one of the sources and perpetuators of human prejudice (i.e., it is unfortunately often better in a competitive environment to be fast, determined, strong, and wrong than to be slow, contemplative, weak, and correct – a tendency many thankfully continue to strive against) (Todd, Bodenhausen & Galinsky 2012).

Rapid and complex *perceptions about other people* constitute one category of such human social interaction mechanisms. Is another person similar or dissimilar to me? Is another person an ally or an enemy? Is he a member of my cohort (an in group) or a rival band (an out group)? To what extent does she know and share information in common with me? What is his current emotional state? Is she interested in or attracted to me? What is his social, sexual, threat, and potential partner viability? Is she wooing or misleading me? What is the nature of his emotional, sexual, and cognitive responses to me? Is he being Machiavellian?

Social *hierarchical monitoring and motivations* are also fast and moderately out of our control (although we certainly can be cognitively strategic about them) and constitute another category of human social mechanisms. Is a person someone to align with or follow or someone to be avoided based on her position in a hierarchy? Is a particular other individual helpful or harmful to my social status? What are people above and below me

in the hierarchy thinking about me now and as a broader reputation? Am I indebted to another person, is he indebted to me, and how does this affect my hierarchical status? Are people looking up to me or down on me? Is this a group worthy of my even trying to make headway within, or should I attend to another group entirely?

Social perceptions about other people and social monitoring of hierarchical status thus service the needs of two primary human social motivations – the need to connect with other people/belong to a social group and the desire to achieve better hierarchical status. The extent to which we are similar to other people is a good predictor of success at social connection – similarity is familiar, familiarity is comfortable, and comfort enables social bonding. The extent to which we can draw the admiration of others successfully predicts hierarchical elevation – people will not tend to allow others to rise hierarchically around them if they can help it unless those others are liked. Thus bonding and status, driven by similarity and admiration, seem to be fundamental components of a person's lot in life. As will become apparent shortly, these also seem fundamentally wired into our cognition.

Social information and cognition thus are not just some cleanup processes working on a given linguistic interpretation late in the comprehension game. Rather, they exist from the beginning, influencing how a speaker feels and what he will even do and say, how he will do and say it, and what he expects as a response, and in what form, from others. It is a primary framework through which language production is conducted and comprehension is subsequently guided. It involves emotions, attitudes, prejudices, social positioning, power, stance, and many other human-interaction phenomena that exist semi-independent of language. Context, social, and other information precedes and intercedes, as well as follows, linguistic processing to affect meaning.

Neural and Behavioral Evidence

Evidence of these claims is found in social psychology, cognitive psychology, sociocognitive neuroscience, and other social sciences, supporting the recognition that social processing is a fundamental underpinning and functional component of abstract thought. For instance, the characteristically human prefrontal cortex (PFC), responsible for managing goal-oriented higher cognitive functions, evolved to enable the channeling of the biological and social functions necessary for survival. Goals, as *the* function of the PFC, channel lower-level, more basic and biological /social functions through abstract meaning making. The cognition involved in social monitoring and hierarchical climbing thus may be strongly intertwined in more

abstract thinking (Hirsh 2010). As such, social variables, for instance, being familiar/friends with someone versus being a stranger, should have very early influences on critical neural structures involved in higher-order cognitive processes (i.e., social schematic structure activation and functioning, abstract thought, and language production and comprehension). For instance, considerations of characteristics and motivations of people from in-group versus out-group cohorts should be intricately involved (indeed, through similar cortical and subcortical neural structures) in language production and comprehension (Hirsh 2010).

These links turn out to have validity. *Internal* social variables, such as one's own social status in a hierarchy, affect how sensitive we are to emotional states of other people (e.g., the lower our status, the more attuned we are to others' emotions). This holds for both actual and experimentally manipulated social status (Kraus, Cote & Keltner 2010). Status also affects our likelihood of taking others' perspectives (Galinsky et al. 2006) – recalling a time of experiencing low social power makes us more likely to adopt others' viewpoints. These tendencies are also neurally structured. A number of brain regions have been established as central for cognitive activity concerning other peoples' feelings and thoughts, including the dorsomedial prefrontal cortex (DMPFC), the medial prefrontal cortex (MPFC), the precuneus/posterior cingulate cortex (PCC), the temporoparietal junction (TPJ), and the posterosuperior temporal sulcus (PSTS) (Frith & Frith 2006; Lieberman 2010; Mitchell 2008). Studies using functional magnetic resonance imaging (fMRIs) reveal that adults and adolescents in lower-status situations show greater neural activity in these regions when encoding information about other people, thus showing the fundamental neurocognitive link between internal social status and abstract thinking about other people's internal states (Muscatell et al. 2012).

Our social *relationships* also affect automatic and early social neural activation related to higher cognitive processes. When people make a mistake at doing something, the anterior cingulate cortex (ACC), a region associated with conflict detection and performance monitoring, engages the cognitive control systems of the PFC. This is all part of the overall system that enables us to learn from our mistakes (Botvinick et al. 1998; Carter et al. 1998; Gehring & Knight 2000; Hajcak et al. 2006; Holroyd & Coles 2002; Kerns et al. 2004; Luu et al. 2003; MacDonald et al. 2000; Miltner, Braun & Coles, 1997; Ridderinkhof et al. 2004). It turns out that observing *others* making mistakes produces a similar pattern of activity, suggesting that observational learning is built on experiential learning (Yu & Zhou 2006).

Interestingly, this mirroring is stronger when the other people being observed are more similar to the observer versus dissimilar, whether based on ethnicity (Xu et al. 2009) or more generic similarity (Mitchell, Macrae & Banaji 2006). The effect of heightened ACC activity at another person's mistakes is also stronger when observing actual friends versus strangers (Kang, Hirsh & Chasteen 2010). The strength of the social relationship between a person and someone she is observing thus predicts an automatic and very early-functioning neural system than monitors outcome consistency – the match between expectations and reality. If the social relationship is close, the system functions better.

The *combination of social status and social relations* also reveals effects of social variables on cognitive functioning, abstract reasoning, and behavior. People in relatively higher power positions in social relationships make decisions differently, that is, are less risk averse (Anderson & Galinsky 2006; Inesi 2010); have differing abilities to take actions, are riskier (Galinsky, Gruenfeld & Magee 2003); have a different foci in goal-directed thinking, attending more to personal goals (Gruenfeld et al. 2008); and resist both attempts at persuasion and conformity to external norms (Brinol et al. 2007; Galinsky et al. 2008). Social power also seems intricately related to making choices (Inesi et al. 2011). People who have freedom of choice in social situations are generally happier and more satisfied (Langer 1975; Langer & Rodin 1976). They also perform better and persist more at cognitive tasks (Cordova & Lepper 1996; Zuckerman et al. 1978). Most interestingly, these two sources of social advantage – power and choice flexibility – are essentially interchangeable; the absence of one of them increases the desire for the other, and once one source is sated, increases in the other show diminishing returns (Inesi et al. 2011).

High social power in a relationship thus is very much tied to a certain kind of advantaged cognitive functioning. But does this cascade into broader effects on overall well-being? The answer depends on the level of resolution one uses for measuring well-being. Although socioeconomic status (SES) as a measure of status does predict reported well-being cross-culturally, the effect is fairly weak (Diener et al. 1999). Exceptions to the trend also can be found (Kasser & Ryan 1993). But finer measures of social status, such as sociometric status and the level of respect and admiration people have in directly contacted local groups (e.g., face to face) such as co-workers, neighbors, and classmates, correlates much more strongly (Anderson et al. 2012). As sociometric status rises and falls, so do measures of subjective well-being, and these correspondences are channeled through feelings of power and acceptance.

A picture thus is emerging about the relationship between one's social position – how one sees others and how one is positioned among others – along with cognition broadly construed. If a person views herself as low in social status, neural and cognitive processing that could *elevate* that person's status is enhanced (e.g., reading others' emotions and minds). However, if a person is socially close with another person/other people or has a relatively high position in a social hierarchy, different neural and cognitive activity enhancements can be measured that would help the person *maintain* those social positions (e.g., enhanced observational learning, detecting violations of expectations, making more personally oriented goal-directed decisions, resisting influence from others, and conducting and persisting at high-level cognitive tasks). These status-maintaining enhancements result in improved cognitive functioning that ultimately cascades into general well-being. But what about impacts on more specific higher-level cognitive functioning and, in particular, on language production and comprehension? Can social effects be observed in these domains?

One source of evidence is the degree to which language comprehension can be affected by social characteristics in the comprehender, such as his personality. Message tailoring, for instance, in advertising and other persuasive language use shows such facilitation. If advertising messages are oriented to match a person's "motivational orientation" or her tendency to seek advantages versus avoid disadvantages, the processing of the messages varies. Wording congruent with a person's motivational orientation is more fluently processed and more positively evaluated compared with wording that mismatches. For instance, a person with an advantage-seeking motivational orientation processes and evaluates messages that align with that perspective (e.g., "Shampoo X makes hair shiny!") better than wordings that match the disadvantage-avoiding perspective (e.g., "Shampoo X prevents hair tangles!") and vice versa.

A similar advantage in language comprehension more broadly measured was found with messages that match the primary five personality traits (e.g., extraversion, agreeableness, conscientiousness, neuroticism, and openness/intellect).[18] People who report being more extroverted (e.g., outgoing), for instance, rated messages catered to that personality trait (e.g., "With XPhone you'll always be where the excitement is") as more persuasive than messages geared toward the opposite trait, introversion (e.g., "Stay safe and secure with the XPhone") (Hirsh, Kang & Bodenhausen 2012) and vice versa.

This pattern of social information affecting cognitive processing is also fairly robust. Variables that only minimally activate social connections can

have strong effects on the speed and accuracy of primary cognitive functions. For instance, Shteynberg (2010) manipulated the degree of social connection between experimental participants and "other people" merely by informing participants that the other people had either chosen the same color avatars for a computer task as the participant (high-similarity condition) or a different color (low-similarity condition). Participants then did word processing and memory tasks, being told that the other people were performing the same tasks. Word-recognition accuracy and word-recognition latency were both better in the conditions where participants thought they were performing with "similar" as opposed to "dissimilar" other people, as defined by the avatar color choice. The author hypothesized that the results were due to a "social tuning hypothesis" whereby

> Stimuli that are assumed to be experienced by one's social group have greater cognitive accessibility. The cognitive accessibility of a stimulus refers to the readiness with which a mental representation of that stimulus is employed in cognitive operations [implying that] even in the absence of intragroup communication, group members will develop shared memories. That is, if for Group Member A, Stimulus X is more cognitively accessible because he or she correctly assumes that Group Member B has experienced it, and likewise, if for Group Member B, Stimulus X is more cognitively accessible because he or she correctly assumes that Group Member A has experienced it, then Group Members A and B establish a shared memory for Stimulus X [Shteynberg 2010, p. 684].
>
> Taken as a whole, these results are consistent with the hypothesis that stimuli which are assumed to be experienced by one's social group are more prominent in both cognition and behavior [Shteynberg 2010, p. 683].

Various kinds of perception and cognition thus far have been cast as predominantly involved in improving a person's social bonding or status – if a person is low in social connection, certain perceptual/cognitive activity will become enhanced to enable that person to find a cohort or gain social status; if a person is high in social connection, then other perceptual/cognitive functioning is enhanced to maintain position. However, high social connection and accordingly enhanced perception/cognition performance also can *inhibit* some overall cognitive performance, acting to stifle activity such as creativity. Release from entrenched social connection thus can benefit some types of thinking.

Maddux, Adam, and Galinsky (2010), for instance, investigated people's direct experience and then recall of multicultural exposures (e.g., living

abroad) and, in particular, functional learning experiences and found a connection with increased creativity, as measured by two kinds of language tasks and the Duncker candle problem (e.g., how to mount a candle to a wall with a cardboard box of tacks). Although it is certainly possible that improved creativity itself is a means for increasing one's social status, work such as this also suggests how ingrained social and cognitive functioning can stall some human accomplishments. As the authors put it:

> Culture is an inherent part of the social world. From the moment of birth, people are continuously educated and socialized as to the culturally appropriate linguistic, cognitive, affective, and behavioral skills necessary to engage in proper, socially sanctioned behaviors. As individuals develop and learn more about their own culture, this knowledge becomes deeply ingrained and automatized, helping individuals make sense of their social environment and coordinate their behavior with others from the same culture with relative little effort. These socialization experiences then predispose individuals to respond to environmental cues in culturally normative ways.
>
> Although culture-specific knowledge is useful in simplifying the social world and allowing individuals to coordinate their behavior with each other, culture can also constrain a number of psychological processes, potentially impairing novelty and innovation. Because culture consists of routinized responses and knowledge structures, it can make familiar and common psychological responses highly salient, thereby obstructing obtaining and retrieving novel ideas. Thus, culture serves both as a coordination device and as a constraint on thought and behavior [Maddux, Adam & Galinsky 2010, p. 731].

As discussed earlier, people's social status can have an effect on the degree to which they will take other people's perspectives in cognition – when a person is in a lower social status, for example, he will typically increase his consideration of others' perspectives and, conversely, lessen that consideration as social status increases. However, people's perception of the similarity between themselves and others also affects perspective taking – if people consider others to be similar to themselves, the likelihood of taking others' perspectives is high (Adams et al. 2010). This pattern is again indicative of sociocognitive concerns relevant to gaining and keeping social status. If you do not have social status, reading others' minds helps social climbing. If you are in a cohort, staying there is helped by taking others' viewpoints. These influences on perspective taking have a straightforward impact on language comprehension. As also discussed earlier (Chapter 4), perspective taking is an inherent part of common-ground functioning and as such can directly

affect language production and comprehension, including that of figurative language.

One study that directly addressed this chain of sociocognitive focus, perspective taking, and then language comprehension found that manipulations at the front of the chain cascaded to affect the end. Todd et al. (2011) manipulated people's tendencies to consider differences between things versus similarities in them, as might correspond to forcing people to contemplate differences between themselves and others rather than seeking out similarity, to ultimately determine effects on language comprehension (among other effects). If people adopt a difference-oriented mind-set (e.g., describing three differences between a set of objects), they are more apt to take other people's perspectives in conversations. When adopting a similarity-oriented view, however (e.g., describing three similarities between the objects), then perspective taking is flat. Taking others' perspectives subsequently facilitated communication with interaction partners because speakers were less "cursed" by their internal privileged knowledge. Thus it seems that, again, information relevant to the social world (e.g., the degree to which someone considers differences versus seeks out similarities in people) has an in-the-moment effect on the cognitive and linguistic domain (e.g., perspective taking, common-ground considerations, language production, and comprehension success).

The picture that has emerged concerning connections between social concerns and cognitive activity now can be expanded to include higher cognitive and language functioning. As people's social perceptions of others and social status varies, so does their thinking, comprehension, and language production. People in high-status situations think more abstractly (Magee, Milliken & Lurie 2010) as well as more optimistically (Fast et al. 2009). They are even more likely to take gist versus literal-minded interpretations of words (Smith & Trope 2006).

This pattern is also readily observable in figurative language cognition. If speakers are in positions of talking to addressees they hold in high esteem or feel fondness for (i.e., typical of people higher in a social hierarchy), the speakers are more apt to use at least one particular type of figurative language, hyperbole, couched in gratitude acknowledgments (Colston 2002b). Specifically, in using gratitude acknowledgments after having done a favor for an addressee, speakers will exaggerate the extent to which they would be willing to do other favors for the high-status addressee in the future (e.g., "Anytime" or "Anything you need") relative to instances in which addressees are lower in status (e.g., "You're welcome" or "No problem").

We also have seen that such effects of high status need not require major, obvious, current, and ongoing, sociocognitive experiences on the part of a person to occur. The mere recall of a single high-power role or situation from the past is enough to produce such effects. They can even occur unconsciously. People's language cognition, including figurative language, is underlaid by their more general perception and cognition, which are, in turn, underlaid by their social cognition, which can be unconscious, subtle, backgrounded, ongoing, and hidden. What may perhaps be most revealing is the extent to which social influences such as these can be invoked through *physiological/kinetic/sensory* manipulations – the shape a person's body is in can affect all these layers of cognition.

Consider a study that compared social-status invocation via two potential influences, hierarchical role consideration and posture (*how one physically sits*) (Huang et al. 2011). People sitting in powerful posture positions – one arm on a chair's armrest, the other on an adjacent chair back, legs crossed ankle to thigh, and legs wide, stretched past the chair's edge – versus a constricted posture – sitting on hands, shoulders drooped, and legs uncrossed and held together – not only were enough to produce effects of high social status, but the effects also exceeded those of the hierarchical role manipulation – considering oneself in the role of manager or subordinate.

The specific effects of powerful posture also were interesting and indicative of previous research on social power effects – in one task, people were more likely to complete word fragments with solutions related to power (e.g., completing "l _ a d" with "lead" versus "load") (Steele & Aronson 1995), indicating again a cognitive/language task being influenced by a social variable, and a very subtle one. People also reported an overt greater sense of power in the powerful-posture condition. Importantly, this subjective rating measure was collected after the implicit cognitive one. In a second experiment, people were more likely to take a risky action in the powerful-posture condition (e.g., taking a card in a blackjack game when holding cards totaling sixteen with the dealer showing ten) and to think correctly and abstractly (e.g., correctly identifying objects embedded in fragmented pictures and using labels for the objects from a higher level of abstraction – superordinate level versus basic and subordinate) (Bowers et al. 1990; Smith & Trope 2006). Again, this constitutes evidence of a subtle social variable affecting cognitive performance.

This brief review has shown that people's social position vis-à-vis similarity with others and status in a social hierarchy have an enormous impact on mental functioning and outward behavior. Social position effects are in

part fast wired with cognition – people's relationship status with others and people's social status trigger early and fast neural responses in areas central to many key cognitive functions: noting differences versus similarities, detecting schematic exceptions, consideration of goals/planning, taking different perspectives, conflict detection, performance monitoring, learning, judgment, decision making, word processing, memory, language production/comprehension, emotion processing, creativity, and others.

We also have seen in earlier chapters how important these functions are for figurative language use and comprehension, including their role in pragmatic effect accomplishment, through both linguistic models of use/comprehension and as cognitive side effects that leak in and affect meaning. It is thus vitally important that models of figurative and other language use/comprehension acknowledge the importance of social underpinnings of language cognition and incorporate them centrally into their explication in the attempt to explain the complicated processes underlying human communication.

RORSCHACH FIGURES

Chapter 1 introduced the concept of a Rorschach figure, whereby the figurativeness of an utterance may become fully apparent only through looking at the wider discourse preceding the figure and factoring in the pragmatic effects and other derived meaning taken from that preceding discourse, along with linguistic content that is more directly available. The broader context can cast a different light on the figure, enabling nuances of its potential meaning to emerge. The review of psychological influences on figurative language use and comprehension, including both cognitive and social components, has hopefully bolstered this notion of Rorschach figures. One must incorporate leaked-in cognitive meaning influences and social components surrounding interlocutors – similarity, relationship status, and social hierarchy and how they might develop and change across the discourse – for a full accounting of a given use or comprehension of a figurative utterance.

Rorschach figures and the importance of prior discourse influences indeed can be nicely demonstrated with a very simple exercise of viewing and considering a sentence piecemeal and, interestingly, backwards. Consider the following terms and sample sets of hypotheses concerning the terms' potential meanings (the exercise works best if the reader uncovers a term and its hypotheses as a set, one at a time, beginning at the top,

and considers the listed and other possible hypotheses for that set before continuing to the next term/hypotheses):

Terms	Hypotheses
1. Guy	A human male, informal label, etc.?
2. That guy	A specific human male, deictic reference, etc.?
3. Be that guy	A directive for someone to behave like a particular person or type of person, etc.?
4. Don't be that guy	A directive for someone to *not* behave like a particular person or type of person, possible fixed expression, a directive for a guy to *not* be something, etc.?
5. Politician, don't be that guy	A directive for someone to *not* become or behave like a politician, a directive for a politician to *not* behave like a particular person or type of person, etc.?
6. Crying politician, don't be that guy	A directive for someone to *not* be or be like a crying politician, a directive for a weeping politician to *not* weep, a directive for someone to *not* use the word "politician," a directive for a crying politician to *not* behave like a particular person or type of person, etc.?

As one progresses through these constructions, two things become apparent. The first is the increasing range of possible hypotheses as the constructions get longer, given that no prosodic cues are present to determine clausal structure, to lend emphasis, and so on. For instance, different interpretations would hold if prosody on "Don't be that guy" emphasized only the word "that" with a subsequent pause

"Don't be *that*, guy" (6.8)

versus an emphasis on "that guy" preceded by a pause

"Don't be, *that guy*." (6.9)

Such alterations in meaning based on prosodic cues are, however, well known and widely discussed as ways of alternating meaning using the same sequence of lexical items.

Something very different is revealed, however, if one considers how the meaning of the end phrase "that guy" alters back and forth in its degree of fixedness and possible figurativeness as the preceding sentence lengthens. In normal sentence reading, we do not notice how interpretations on end phrases can change because we obviously have not seen those phrases until

we get to the end. We have worked out at least part of an emerging overall sentence meaning by the time we arrive at the end phrase, so all other isolated meaning possibilities will not necessarily loom large. But with a backward reading exercise, end-phrase meanings and their shifts especially can become more apparent. "That guy" as in the second construction in the preceding table, for instance, does not have much of the quality of the emerging fixed expression of the odd or annoying stereotypical person we have all encountered and who we desire to not be or not emulate, at least on a subjective reading. But this may be due only to having first read the first construction, which primes the sense of the generic human male. Had we read the second construction first, then the fixed phrase sense may have been more salient. The third construction's end phrase also seems to not have much of the sense of the fixed phrase, although perhaps more than the second construction. By the fourth construction, however, the fixed-phrase sense is more prevalent, perhaps because of the opening negation, which renders "that guy" as something to be avoided, which is more consistent with the fixed-phrase sense. One could argue that the fixed-phrase sense wanes a bit by the fifth construction maybe due to some muddling given the presence of "politician," a word also with an occasionally slightly negative connotation and perhaps accordingly, stealing some of the negative thunder of the "that guy" fixed sense. The increasing number of alternative interpretations of the construction in its entirety also may dilute the fixed-phrase sense. Having the word "politician" also gives a possible reference target for "that guy," thus also diminishing the likelihood of a reference to the unspecified fixed-phrase sense. By the sixth construction, the somewhat unusual and distinctiveness of a "crying politician" might reenhance the fixed-phrase sense slightly, especially since, in North American culture at least, a *crying* politician is more regularly viewed as negative on average. But still more plentiful alternative interpretations might further dilute the fixed-phrase sense.

The point concerning Rorschach figures is how important the preceding discourse is in the interpretation of final utterances. The backward-reading example shows how different portions of the preceding discourse can alter the sense of the final phrase as being relatively fixed and figurative or more lexical and nonfigurative. Exclusion of some of those portions in the consideration of the final utterances thus can diminish the sense that the utterance is figurative, fixed, indirect, or somehow otherwise interpretable. Omission of the preceding discourse in consideration of a final utterance also can alter the kinds of pragmatic effects the utterance might produce. As clearly as the insertion of the negation in the fourth construction in

the preceding table brings out the figurative fixed-expression sense of "that guy" and its expression of negativity, so would insertion of other content in an earlier discourse illuminate or produce different bits of meaning in a final figurative phrase.[19]

A PRAGMATIC EFFECT ORGANIZATION

Starting in Chapter 3 and culminating in this chapter, the wide array of pragmatic effects resulting from figurative (and other) language comprehension has been presented mainly from the organization introduced in Chapter 3. After much discussion as to how to even approach such an organization, the resulting format separated out pragmatic effects stemming from figurativeness/indirectness in general versus those wed more closely to individual figures or their families. Now that greater consideration has been given to structural, embodied, psychological, cognitive, social, cultural, emotional, and other contributors to pragmatic effects – begun in Chapter 2 as characteristics distinguishing pragmatic effects from similar constructs (e.g., inferences), continued in Chapter 3 as causes of pragmatic effects, and then elaborated on in this current chapter as sources of leaked-in or preceding meaning influences – a broader organization now can be attempted.

This broader organization is based on clustering pragmatic effects around their core origins. Effects coming from low-level cognitive processes, argued to leak in and affect figurative meaning, are, for instance, labeled *cognitive side effects*. Pragmatic effects arising from relevance-theoretic processes are duly labeled *positive cognitive effects*. Other sets of pragmatic effects follow from their sources: social, emotional, and so on. The pragmatic effects are also presented with hallmark mechanisms that drive their appearance and with prototypical figurative forms as representatives. This organization may not precisely delineate in a definitional fashion each of the categories – and, indeed, the category boundaries are fuzzy – but it can serve as a starting point for arranging pragmatic effects from their primary drivers rather than via family resemblances, singular versus broad applicability, or proximity to general metapragmatic effects emerging from research such as the Roberts and Kreuz (1994) study delineated in Chapter 2.

Lastly, this is not offered as an exhaustive list. Nor is it designed to encompass all pragmatic effects stemming from all mechanisms. Neither are the categories or effects themselves meant to be mutually exclusive; a given effect can arise from mechanisms in different categories, and different

figures can achieve multiple effects. Rather, the organization is an attempt to capture categories of pragmatic effects based on their origins, with a sampling of underlying effects given as examples. As such, predominant examples under each category of pragmatic effects, which provide the effect's primary mechanism, and a representative figure that accomplishes it are provided – examples of pragmatic effects under each category thus are shown with pragmatic effect generic/specific (where possible) – sample mechanism – prototypical figure:

Pragmatic Effect Categories

Positive cognitive effects (relevance theory)
Cognitive side effects (cognitive psychological processes)
- Enhanced meaning/shifted concepts – contrast effect – verbal irony
- Enhanced meaning/shifted concepts – anchoring effect – hyperbole
- Negativity expression/shifted polarity – contrast effect – verbal irony
- Negativity expression/enhanced positive-expectation-violation – anchoring effect – hyperbole
- Highlighting discrepancies – inflation of expectation violation – hyperbole
- Humor – discontinuity – multiple figures
- Enhanced meaning – schematic alignment – metaphor

Sociocognitive (Social and Cognitive Psychological Processes)
- Mastery display – analogical synonymy – proverbs
- Mastery display – semantic nondisclosure – colloquial tautology
- Mastery display – multiple mechanisms – multiple figures
- Ingratiation – social reciprocity recognition – multiple figures
- Persuasion – multiple mechanisms (e.g., objectification) – multiple figures
- Objectification – meaning offloading – fixed figures
- Extollation – multiple mechanisms – multiple figures
- Social engineering – in-group out-group invocation – multiple figures
- Identification – schematic association – fixed figures, contextual expressions
- Negativity expression – pretense – verbal irony
- Negativity expression – pretense – ironic restatement
- Impoliteness – taboo violation – dysphemism
- Impoliteness – taboo violation – profanity

Multimodal Effects
- Emotion expression – production characteristics (e.g., intonation, facial expression) – multiple figures
- Emotion elicitation – production characteristics – multiple figures

Structural Effects
Negativity expression/derision – schematic mismatching – personal synecdoche
Negativity expression/derision – iconicity – asyndeton
Enhanced meaning – caricature highlighting – metonymy
Enhanced meaning/semantic similarity – juxtaposition – metaphor
Enhanced meaning – analogical alignment – rebuttal analogy

Note that combinations are also possible (e.g., cognitive structural effects). (6.10)

PRAGMATIC EFFECTS AND INTENTIONALITY

At many points in this book, the point concerning the lack of determinedness in figurative pragmatic effect accomplishment has been raised. Just because a given figure (e.g., hyperbole) invokes a particular mechanism (e.g., an anchoring effect) that typically results in a certain pragmatic effect (e.g., altered perception of the remembered target topic's physical dimensions – enhanced meaning) does not mean that the pragmatic affect is guaranteed to occur. Other competing, diluting, offsetting, or other types of pragmatic effects or contextual idiosyncrasies may occur in parallel and prevent the pragmatic effect from happening or dilute or shroud it (or even enhance it).

This lack of fate in figurative comprehension also speaks to the issue of speaker intentionality and pragmatic effects. Certainly, as just reiterated, a speaker might intend a given pragmatic effect, and that effect might not occur either because it is overtaken by some other effect or issue or because a hearer just does not compute it. But the relationship between intentionality and pragmatic meaning is much more complex than that. Pragmatic effects *unintended* by a speaker might occur in a hearer. A speaker might intend pragmatic effect X but instead achieve pragmatic effect Y. Hearers may be particularly primed to compute some sets of pragmatic effects but not others, resulting in a systematic bias in how intentionality is skewed – only certain effects from a speaker, intended or not, get achieved, whereas others do not occur, whether or not intended by the speaker.

The ways in which pragmatic effects can cascade off one another, discussed in Chapter 2, also can be intentional or not. A speaker may intend a family of pragmatic effects to arise from a figurative construction, perhaps as a logical chain sequence or spreading kind of activation. These effects then may or may not actually occur, individually or as an entirety.

As with individual effects, entire sets of pragmatic effects also might arise unintentionally.

Intentionality also can *emerge* in the midst of a discourse rather than existing a priori in speakers. Speakers and hearers may begin a conversation without any particular intentions about pragmatic effects. They might instead just get talking about something rather innocuously, but then a pragmatic effect happens to occur. Perhaps one of the speakers unintentionally says something amusing. The ensuing laughter then may instill in the speakers the more specific intention to make the other person laugh as part of the emergent camaraderie and even make the interlocutors believe that such a goal was in place at the beginning. Given the complexity of how some pragmatic effects interact with each other, a modicum of randomness also can enter into pragmatic effect computation that can assist this emergent intentionality phenomenon.

Emerging intentionality also brings up the role of *awareness* on the part of speakers of their and their interlocutor's potential intentionality. Rather than saying that intentionality is not present at the onset of a discourse, one could argue that speakers just are not aware of it. Given the array of social motivations discussed previously that greatly affect our behavior and communication as argued, many without our awareness, plenty of source material is available to foster intentions (e.g., a speaker admires an addressee and so intends to impress him or her but may not realize this). Other intentions could stem from other internal states, also without speaker awareness (e.g., curiosity, emotions, personality traits, subconscious or innate fears, obsessions, prejudices, and physiological drives).

Inferring intentionality in one's interlocutor also affects pragmatic effects or at least some of them. If a hearer realizes, for instance, that another person is seeking to win her favor, but the hearer does not like the speaker, then the hearer might resist certain pragmatic effects such as humor (e.g., not finding something humorous at all or showing no effect if a comment is found to be mildly amusing). Of course, on occasion, pragmatic effect resistance might be overcome, such as occurs, for instance, when a speaker wins over an addressee's humor resistance by forcing her to laugh. Still other pragmatic effects may occur with virtually no possibility of resistance. Consider the vivid metaphors in Chapter 4 (4.17 & 4.18) discussed for their likelihood of getting and staying established in common ground such that they might affect memory later. Meaning-enhancement effects of this nature might be difficult to resist (e.g., not being able to get a particular comment and/or image out of one's mind).

COMPLEXITY APPROACHES

Modeling

Many phenomena that are influenced by multiple different things with many of those things having their influence at the same time or nearly simultaneously have highly dynamic behavior that is often difficult to understand or model with relatively simple cause-effect approaches (e.g., manipulate one variable, and see if it has an effect on another variable, keeping everything else equal). This holds even if the cause-effect approach used is very sophisticated (e.g., multiple-variable, within-unit-of-analysis, and fully factorial experimental designs). Too many low- and higher-level interactions are possible, and indeed some degree of chaotic or semirandom functioning may be at play. Some examples of such complex phenomena are meteorological effects, social behavior, fluid dynamics, sporting events, and many domains of neuroscience and cognitive science.

Figurative language comprehension, use, and pragmatic effect computation might be one of these domains. As outlined in this book so far, comprehension of a given figurative utterance is affected by social influences, cognitive influences, interlocutor influences, contexts, pragmatic influences and constraints, expectations, prior discourse, emotions, audience influences, and many other linguistic comprehension factors. And these are not the only influences acting in normal instances of figurative language use and comprehension. If we consider all the other communicative and meaningful things going on in figurative usage contexts, the picture is even more complicated: gestures, facial expressions, nonverbal information, body posture, interlocutor spacing, gaze, gaze direction, gaze dynamics, timing, intermingled other language and meaning sources (e.g., signs and symbols in the environment), accent, voice gender, voice age, voice regionality, and many others.

To grapple with this complexity, scholars and researchers of figurative language should consider using complex quantitative analysis and modeling techniques with greater frequency. As briefly introduced in Chapter 1, frameworks for figurative language modeling based on constraint satisfaction (Campbell & Katz 2012; Pexman 2008), dynamical systems (Gibbs & Colston 2012; Gibbs & van Orden 2012), or other multivariate approaches could help to wrestle with this very complex, multidetermined, dynamic meaning system. This is not to say that simpler experiments and observational quantitative techniques have no merit. As also argued in Chapter 1, the best approach all around is to tackle the figurative language problem with a wide variety

of methods, analyses, modeling, and data, even mixed together in the same studies, to provide converging measures on figurative phenomena.

Metatheorizing

One additional point concerning complexity moves us away from quantitative and modeling issues and instead addresses metatheoretical underpinnings. What is the best overall metatheoretical approach for looking at figurative language? The approach taken by most of the research reviewed in this book has been essentially cognitive scientific – look for ways to explain figurative language use and comprehension by attempting to observe and measure or experiment on and infer linguistic, cognitive, perceptual, and moderately social (in the sense of co-cognition) structures, functions, operations, processes, mechanisms, and so on.

A newer way based on sociocognitive science – with a much stronger emphasis on *social* – along with a smattering of neuroscience might be rising as an alternative framework. This approach, as briefly outlined in this chapter, explains figurative language use and comprehension by looking for fundamentally human and/or primate social drivers of behavior, as well as limits on behavior imposed socially, which then serve to structure and prioritize cognitive functions, which, in turn, underlie figurative cognition.

A third metatheoretical approach might come from embodiment and the view that cognition is not just isolated to the interiors of skulls, with sensory systems peaking out and motor systems following orders, with other physiological systems just ticking by on automatic. Rather, this approach views the entire brain, mind, body, world system as the engine of cognitive functioning, including figurative cognition. In this view, bodily experience and physiological functioning have a role in otherwise purported to be purely *cognitive* functioning. As such, the actual physical experiences a human body is undergoing, for instance, standing, running, exerting, and resting, are part and parcel of cognition in the form of embodied simulations, including figurative language use and comprehension. This approach, of course, morphs a bit into the sociocognitive metaview when bodily experiences invoke social dominance or submission.

One other approach might come from evolution. One could argue that figurative cognition, involving figurative language use, comprehension, and more, is at core an evolutionary adaptation that had survival value for early humanoid species. The ability not only to cognitively represent the external world but to also mix up those representations in interesting ways and then use those mixtures communicatively might have acted something like

representation squared. People not only can represent their world, but they also can represent those representations and alterations of them and communicate accordingly. Thus, viewing one thing in terms of another (e.g., a gourd bowl as a hat) is an underpinning of first conceptual metaphor and then spoken (or gestured, signed, etc.) metaphor. Conceptualizing opposition in adjacency (e.g., fire and ice together) underlies first situational irony and then verbal irony. Visualizations of things being stretched (e.g., a fish doubling in size) supports situational hyperbole and, in turn, spoken hyperbole and so on.

The bottom line may be that no one best way exists to metatheoretically approach figurative cognition. Each of these approaches garners some empirical support. What might thus emerge as optimal is some hybrid mix of each approach containing linguistic, cognitive, social, embodied, and evolutionary ingredients.

CONCLUSION

A number of years ago I was working with a small group of undergraduate students on a team research project. One day all four of the women were in my faculty office talking with one another and only partially including me in their conversation – my attention was divided; I was simultaneously checking something on my computer and trying to finish a few urgent things so that we could start our meeting. One of the students was commiserating over a relative of hers who was temporarily living with her. He was a troubled preadolescent, sent away from his New York City home to my student's house in an attempt to keep him from trouble. My student was worrying that nothing seemed to motivate the boy. This expression on her part was only a small portion of the larger group conversation; the students were rather rapidly popping from topic to topic and not greatly listening to one another, including this student's woes. I could not help hearing her, though, noting her sadness and feeling of helplessness at the boy's plight – and perhaps that the others were not deeply registering her expression.

A moment after she had finished speaking, I piped up with a comment from out of nowhere, said while still looking at my computer:

"Build on the positives." (6.11)

All three of the other women, who had been talking at that moment, went silent, and they were all looking at me as I turned from the computer toward them. The student/relative of the boy brightened a bit, noting my

acknowledgment of her worry. The others looked on, slightly contrite, but also somewhat surprised and serious. They all also seemed to note the value of this advice, their being psychology undergraduates and understanding something, at least academically, about how to help someone like this boy – although they might not have seen that introductory psychology content actually used earnestly in the real world before – one of those lovely "teachable moments."

But why did my comment elicit this response? Did they think I was not listening? Did they presume that I did not care? Were they surprised that a college professor would be human to them and show a serious interest in something personal about one of them? Were they surprised to see sensitivity and compassion coming from an adult male? Were they impressed at the quick and concentrated good advice? Had my demonstrated attempt to help a boy I had never met startled them? Did they think I was weird? Did they think this was none of my business? Were they simply struck by something unexpected?

I have no definitive answers to these questions, although I suspect many of the answers would be affirmative or at least partially affirmative. But one fact demonstrated by this example is that many of the things the women could have been thinking in comprehending my comment were not contained *in* the words I had said. They were rather somehow *about* what I had said and *that* I had spoken. Some of that meaning might have originated in my statement, but much of it was also derivative, separate, enriched, or created from some kind of morphed statement and outside meaning, along with something maybe novel, perhaps realized for the first time in one of the hearer's minds. Some of it was also coming from their simply having collectively witnessed an event, my speaking, at the time I did, in the way I did, about what I did, in the midst of the collective stream of consciousness occurring at the time, along with their preexisting conceptualizations that they had with them before I even spoke.

This book has been about this type of meaning – what it is, what are its types, how is it brought about in language use, how prevalent is it, and why speakers ignite or provoke it. Most of the examples used in this book have addressed these questions for figurative language and on occasion indirect language of many different types. This is justified given the density, richness, and concentrated nature of meaning in figurative and indirect language usage.[20] What is especially interesting about (6.11), however, is that my statement was not figurative. Or at least it was not *very* figurative if one interprets "build," "on," and "positives" as metaphorical, even though each of those words has a fairly generic nonfigurative sense. Yet one can readily

see that a great deal of this kind of extra meaning happened nonetheless regardless of how the statement is labeled.

One way scholars have attempted to explain all this meaning derivation is to dissect it into differing parts. One division is between processing, comprehension, and interpretation. There are also many others. One lesson I feel is shown by much of the research reviewed here, along with many of the examples, demonstrations, explanations, and claims, is that these divisions are messier than some might like. Interpretations sometimes can be said to almost be in place prior to any language getting used because people are contemplating what a scene is all about before someone speaks. Rather low-level processing of a word also can take place relatively late in a hearer if other information enables the gist of an utterance to come forth without the word. Plus, the possible triggerings of schematized chunks of common interpretations, such as a sarcastic one, might facilitate presumed "late" processes, helping them to occur nearly simultaneous with believed to be "earlier" ones.

Not only are these divisions messy, but they are also leaky. A number of cognitive side effects, as well as socially mustered ones, were argued to slip in at all stages of language comprehension, including prior to and at the very early stages of language processing. They can produce bits of meaning all on their own via interactions with one another or via interaction with language processing. A wide array of other meaning instillation and exchange systems, semi-independent of language, many expressed and comprehended multimodally – having evolved early and separately or alongside language proper – also have their influence at all stages of language processing.

All these different influences on meaning, from figurative and other language use, also were argued to require a much bigger umbrella of a language comprehension account under which meaning making occurs. Such an account need not discard many important contributions of the array of existing explanations for both individual figures (e.g., pretense for verbal irony) and figurative language and language in general (e.g., relevance theory), but it may need to enable additional meaning sources to have their sway and in all the ways they do so. Importantly, a call also was made for more complex modeling and analysis of figurative use and comprehension data to account for this rich medley of meaning sources and the ways they clash and harmonize. Another call also was made to continue the expansion into multimodal, gestural, and other paralinguistic systems for a more widely encompassing account of figurative language use and comprehension.

The broadened view of language comprehension called for here also may require a new approach to notions such as "meaning" and "pragmatics." If

more psychological phenomena as described here are playing a role in what occurs inside and between speakers as they comprehend language and are tightly interwoven *in* that comprehension, then perhaps meaning should encompass more than just cognitive/propositional content. Other tangible conscious experiences such as emotions, attitudes, moods, alignments in the sense of devotions or loyalties, and others may belong as well. As stated in Chapter 1, language is so intertwined into all we do in our cognitive, social, and emotional lives that we must attend to the full minds, bodies, cultures, and groups doing this meaning making to properly account for it.

So what does the future hold for continued research and scholarship on figurative language use and comprehension beyond this broadened approach? What specific questions remain or content has been untouched that requires our attention? One possibility concerns the development or acquisition of pragmatic effects. Much attention has been paid to the development of figurative language comprehension and production, but less developmental work has addressed pragmatic effects. The notion of schematized comprehension, addressed briefly here, also could be investigated further, including how such schema might develop. Related to development/acquisition of pragmatic effects is how they might change with aging. Given changes in narrative skill across the lifespan, what role do pragmatic effects play in this?

Attention to aging also brings up the notion of theory of mind and its role in language and aging. Theory of mind usually has been considered a more or less all-or-none ability with perhaps some gradations in people with certain disorders. But could long-term social skill and experience, acquired in elder years, force us to rethink theory of mind across the lifespan and how it might affect figurative language production and comprehension as we age *and* amass sophisticated social knowledge? We have seen here that social motivations play a key role in figurative cognition. Would increases in social knowledge and experience alter that role? Put differently, should theory of mind be just the acquired/developed notion in childhood that other minds like our own exist and may or may not know things, or should it be concerned additionally with the amount and sophistication of that understanding of other minds and how they function built up across the lifespan?

Lastly, other aspects of psychological functioning not treated here also may be involved in figurative language production and comprehension. Attachment theory and mimicry, as a developmental account and characteristic primate social process, may be involved. Ideas from cognitive psychology such as crystallization in thinking and intelligence might belong in the

mix as well. Connections between psychological research on creativity as a broad human skill and figurative cognition also might be worthy of further exploration. The pool of potential new ideas to bring to the investigation of figurative language is not yet dry.

NOTES

1. *WHY* DON'T PEOPLE SAY WHAT THEY MEAN? WEALTH AND STEALTH

1 All language, at least minimally, is underdetermined, but figurative and indirect forms exhibit generally further levels of disconnection between surface form and intended meaning.

2 Or a writer's, although the two can be very different.

3 Although its scope *is* argued in Chapters 3 and 6 to encompass psychological and other effects perhaps more broadly than current views allow.

4 These being a generic few of many other complex social processes (e.g., deception, Machiavellianism, ostracism, in-group/out-group formation, idolization, quid pro quo, defense, embarrassment, adoption, usurpation, theft, and generosity).

2. *WHAT IS A* PRAGMATIC EFFECT? MULTIDISCIPLINARITY AND SCOPE

1 Research on language comprehension via embodied simulations does suggest a sequence of simulations, occasionally with a final summary simulation at the offset of a portion of text or speech (usually a sentence). But this is different from a full-blown nonfigurative interpretation being computed and then discarded prior to a corrective figurative interpretation then taking place.

2 Positive cognitive effects have been called other things in previous explications of relevance theory, including *cognitive effects*.

3 No strong claim is being made that precisely and only these positive cognitive effects would get made in this situation – indeed, different metaphor comprehension theories would have serious disagreements about this. This set is offered merely to demonstrate that *some* set of reasonable PCgEs would get made that would collectively and somehow apply the negative quality of a root canal experience to that of watching the particular sporting event.

4 Research on psychological inferences in language processing is, of course, paralleled by the theoretical work in philosophy and linguistics on context-dependent

comprehension processes for sentence, said, implied, and other meaning levels (e.g., indexical, modulation, saturation, circumstance relativity, etc.). The psychological inference work was in part motivated by these theoretical debates in philosophy and linguistics, but it was also conducted under the presumed independent and more cognitive-psychological motivation of empirically determining the specific time courses of inferences in language processing.

5 How inferences are intricately connected with the decades' long research on situation models and their development during lengthier text and discourse comprehension, both in how inferences accumulate and change in situation models (Trabasso & Suh 1993; Zwaan & Singer 2003) and in how situation models themselves support or inhibit new inferences (Van den Broek, Rapp & Kendeou 2005), is also a fascinating, rich, detailed, and important issue and, unfortunately, also beyond the capacity of this chapter.

6 Gibbs and Colston (2012) provide a thorough critical analysis of the immense complexities in making comparisons of these kinds, a problem for much of the previous psycholinguistic work on figurative language use and comprehension.

7 Indeed, as discussed in Chapter 3, polarity shifts such as these are but one part of a tangle of influence mechanisms potentially occurring in figurative language comprehension, all of which can interact with causal consequence (and other) inferences (e.g., the feigned innocent quaintness of the tenor of [2.23], which could be enhanced with colloquial schmaltz [i.e., "Gee whiz" or "Oh boy"], could strengthen the perceived actual viciousness of the speaker, leading to the causal consequence inference that, for instance, the speaker will seek later retribution for the player's failure).

8 Chapter 6 provides a wider array of social and other psychological influences on pragmatic effects.

3. *WHAT ARE THE* PRAGMATIC EFFECTS? ISSUES IN CATEGORIZING PRAGMATIC EFFECTS

1 Relatively direct speech (text) also can achieve certain pragmatic effects by virtue of that directness, in addition to achieving particularized effects via specific modes within direct language. Direct and indirect pragmatic effects may even be similar (e.g., mastery display), but indirect effects warrant a separate discussion because the mechanisms underlying them might differ to a degree from those supporting direct language effects.

2 Indeed, the example is attributed to Howard Stern, radio and television personality, offering open advice to Eddie Vedder, highly talented tenor lead singer for the alternative American band Pearl Jam. The comment followed a series of media reports in the 1990s showing Mr. Vedder speaking inelequently.

4. *HOW* IS FIGURATIVE LANGUAGE USED? THREE KINDS OF ANSWERS

1 See also Yao, Song & Singh (2013) for ironic uses of the *bei* construction in Chinese.

2 People's answers to indirect requests such as "Do you have the time?" also use common ground to convey the requested information, as well as to optimize relevant additional information, for instance, that a general answer ("It's almost 3") as opposed to a very precise one ("It's 2:53") is sufficient for the purposes at hand (Gibbs & Bryant 2008).

3 Note that automaticity as used here and earlier in the chapter, compared with determinism, as argued at various points as not applying to figurative pragmatic effects, are separate notions. Automaticity means that a pragmatic effect can or will unfold readily and without explicit conscious cognitive work being required. Determinism means that a pragmatic effect is essentially inevitable despite the presence of potentially counter or mediating effects.

4 As a related point, if a hearer derives some degree of derision from a speaker using a synecdoche, as in saying the personal version from (4.21) with prosodic emphasis on "brown eyes," would that perceived derision be coming from the intonation itself or from the attention the intonation draws to the diminishment or other mechanisms the synecdochic figure uses?

5 Indeed, this buildup is apparent even in the short (4.26) example; longer discourses would abound in such influences.

6 The picture is even more complicated when one considers mixtures of figures and/or their pragmatic effects. If a speaker is attempting, for instance, to ironically insult, to enhance meaning with a metaphor, and to achieve humor simultaneously, perhaps for the resulting mastery display, the particulars of delivery issues are pronouncedly more complex – getting someone to laugh at an ironic metaphor while you insult him or her requires delicate intonational skill.

7 Many municipal and other bus services in Canada, and undoubtedly other places, alternatively display the phrase "Out of Service" with the word "Sorry" on buses that have completed their service shift. Internet images could, of course, also have been created to show this message rather than being actually photographed.

8 The pragmatic effects marked with an asterisk in this table are not exclusive; many different occasions could warrant inclusion of one or more other pragmatic effects, but the marked set seems closest to the core cathartic conceptualization process.

5. *WHAT* IS FIGURATIVE LANGUAGE *USE*? PREVALENCES, PROBLEMS, AND PROMISE

1 This is related to the earlier issue of whole versus fractional counting of such blends. Survey research allowing open-ended responses deals with this issue typically by dual analysis, once by whole-category quantification (i.e., counting whole every separable subresponse a respondent makes) and again with first-mention coding (i.e., counting only the first subresponse a respondent makes). An analogue for figurative prevalence quantification would be analysis including counts of every subtype of figure a given construction exhibits (e.g., an ironic, hyperbolic metaphor = 3) versus only the dominant form, assuming that it is determinable (e.g., metaphor = 1).

2 The Pragglejaz Group is a collection of international interdisciplinary metaphor scholars who meet semiregularly to consider the metaphor-identification problem. Their title is an anagram of the given-name initials of the original members.

3 Although not a perfect indicator, some reasonable identification is possible using sarcasm hashtags (e.g., "#sarcasm") in tweets or other social media messages (Kovaz, Kreuz & Riordan 2013; Riloff 2014; Riloff et al. 2013).

4 Other approaches looking for irony in text are based on cotextual markers (see Burgers, van Mulken & Schellens 2013).

5 One could even presumably use such pre-post comparisons to seek validation of the speaker-centered pragmatic effects discussed at the end of Chapter 4 – would one see lesser evidence in *addressees*, for instance, of the set of five pragmatic effects argued to have special import for speakers given how those effects have presumed internal speaker motivations relative to other comparable sets of effects?

6 Attempting such field experimental comparisons raises the same issues and problems as attempting to find comparable pairs of items in experimental work (Gibbs & Colston 2012), and the reality of limitations in finding such comparisons in naturally occurring corpus or observational data while attempting to maintain interlocutor and contextual comparability goes without saying. It is nonetheless worth contemplating such issues of control and comparison because they affect how one interprets findings.

7 Of course, such diversity also can shroud the possibility of finding a weak but reliable effect – the classic "catch 22" of such comparisons – the randomly appearing bits of affirmation in the control snippets of discourse (some produced by speaker laughter, others produced by different causes) may prevent the systematically appearing affirmation in the postmetaphor samples (arising predominantly from the metaphors) from appearing statistically significant if the metaphor-humor causal link is only a small effect.

8 This was the finding when events turned out greater in magnitude than expected. No differences were found when events turned out less than expected. This interaction was the source of the *inflation hypothesis of hyperbole* (see Chapters 3 and 4) – greater-than-expected events can be inflated more readily than less-than-expected ones – thus implicating the role inflation plays in pragmatic effect accomplishment for hyperbole.

9 Of course, any measures relying on human memory face their own issues of validity (e.g., memory is demonstrably fallible).

10 Very precise percentages such as this may not be obtainable, but reasonable ranges might be, or at least relative differences between different pragmatic could be revealed. For instance, if the Chapter 2 claim that the three primary broad pragmatic effects are *enhancing meaning*, *expressing negativity*, and *guidance of others' actions* is true, then those three should rank relatively higher than other effects (depending, of course, on the frequency of the underlying figures producing them).

11 The woman shows more bored resignation than scorn and only lightly says "Honey, knock it off" before quickly returning to the closet, as if to

not invest any more time than necessary in her response – the man simply says, "Yeah?" to "Honey …" and then again "Yeah" in compliance with her directive.

12 Emotion elicitation also may have been attempted, leveraged via the repeating lyrics – making the woman feel the same frustration as the man by having to endure tedious repetition of something.

13 Such collages and repetition techniques, of course, have been used many times in the past by artists and musicians, on radio and television, in movies and the theater, on the Internet, in advertising, and so on, but the ability of a normal, everyday person to access and manipulate such rich cultural content quickly, at their fingertips, and in the midst of a live conversation may be a newly emerging phenomenon.

14 Another possible reason for the waning of this construction is its impoliteness. Unlike verbal irony that frequently can manage politeness and face issues, the retroactive negation construction provided little cushioning of its expressed negativity.

15 Referencing the use of the phrase by George W. Bush on completion of the initial phase of the US-Iraq war, before the Iraqi insurgency began.

16 The construction also can be taken as irony, pretending to celebrate a person's death or to be clueless – finding positivity in death.

17 A side story with an interesting figurative twist of its own, the band changed its name due to threatened legal action by the *actual*, not figurative, Chicago Transit Authority.

18 Indeed, the latter *tension-reduction* pragmatic effect was my main motivation for initiating this exchange, picked up by the program assistant as we sought to calm the adjunct instructor. Happily the attempt was a success.

19 Many common punctuation and formatting characteristics also likely function in this way (i.e., italicized text *visually* stands out from normally formatted surrounding text to convey that the information in italics *conceptually* stands out from surrounding content).

20 "Appreciation" in the sense of noticing. Appreciation in the sense of admiration may have been more variable.

21 Blue Van Meer, who has been referred to as a modern Holden Caulfield from *A Catcher in the Rye* (Viking Press 2006; Little Brown 1951).

22 Alterations such as this are used in advertising, entertainment, and other venues but often with much preplanning and revision. They also may undergo an arc of acceptance from novel to gimmicky but perhaps return later.

23 Although repetition certainly can, as in "This plan is crazy, crazy, crazy."

24 The immensity of available Internet content and the size of the population accessing it also affect the objectivism pragmatic effect (and possibly others). Peoples' implicit knowledge of the enormous population viewing the Internet can make a posted figurative (or other) statement seem particularly meritorious. Conversely, the content enormity and peoples' awareness of information saturation and audience splintering can have the opposite effect. It is as if the Internet provided users with megaphones and noise-canceling headphones simultaneously.

25 The use of "culturenyms" as a category also may be affected by the arc of acceptance, as in the retroactive *not* construction, including possible reacceptance as a normative technique some time later.
26 See Chapter 4 for related issues concerning figurative language delivery.
27 Use of dated exclamations for ironic effect, as in saying "My stars!" about events considered uninteresting, is another example – discussed in the section "Fads and Fades."
28 The degree of overlap between the utterance and gesture could be another component affecting figurative meaning and pragmatic effect strength.
29 Hyperbole strength was defined in the same way as in the experiment – by the number of extreme-case formulations appearing in the responses (measured in a variety of ways, all giving the same result).
30 Relevance theory was used as a framework to partially explain this pattern of findings – hyperbole is optimally relevant if it aligns with other meaning mechanisms, for instance, pretense, or if it resides stealthily in other constructions. But if its relevance is unaccounted for, people will take the hyperbole as an indicator of something else within the speaker, perhaps nervousness about getting caught – warranted in accusation contexts to justify the presence of the hyperbole and thus, ultimately, as a sign of the speaker's guilt. Other more structural factors, however, also were argued to play a significant role (see Chapter 6).

6. CONCLUSION: MEANING HAPPENS, BY HOOK OR BY CROOK

1 This would be relative to the speaker having uttered complete gibberish, in which case *all* levels of language processing would be without a base.
2 Although a single misheard lexical or syntactical item also can throw off an entire utterance (e.g., saying to a car salesperson "I'll *try* it" versus "I'll *buy* it").
3 The first theme, the concept of a *pragmatic effect*, was essentially handled in Chapter 2.
4 Relevance theory is used only because of the precision of its explication of beyond-the-text talk meaning; other accounts also may be influenced by the operation of these fast and basic cognitive operations.
5 Minnesota is approximately 150 miles from this university.
6 No strong claims are being made about whether this particular set of confirmed and disconfirmed contextual assumptions and computed positive cognitive effects for verbal irony and hyperbole are precisely and wholly the ones that would occur in these situations. One could argue, for instance, that additional positive cognitive effects regarding the host *remembering* the visitor's dietary preferences could occur in verbal irony, among others. People also may disagree with the particular order and specificity of the positive cognitive effects listed. The main point for present purposes, though, is to attempt a modeling of the *generic* positive cognitive effects occurring for verbal irony and hyperbole to demonstrate relevance theory's ability to accommodate these details.
7 The target person's aggression could be ambiguous when viewed in isolation – the person could be described, for instance, as slamming a car door, which could be due to aggression or a finicky door latch that does not close easily.

8 This is not to say that a final comprehension of negativity expression is deterministic. Other competing mechanism are also at work and can influence the final outcome and interact with one another in very complex ways, sometimes even obviating the negativity shift from a contrast effect. But perceptual shifts, as part of this mixture, do have an isolated automatic quality.

9 The effect can work in either greater than or lesser than directions. A reliably *shorter* distance estimate average would occur had people first considered whether the New York to London distance was greater or less than 100 miles.

10 As with irony, although anchoring effects themselves have an automatic quality, assuming that certain parameters are met, the end comprehension will not deterministically align with the anchoring effect outcome – many other factors can be operating as parallel influences, and these factors can interact with great complexity, possibly even overriding the anchoring effect.

11 One may note the similarity between anchoring and assimilation effects in drawing perceptions toward biasing influences, but their underlying mechanisms are somewhat different, corresponding to the magnitude of divergence between target and biasing propositions (fairly small for assimilation effects, fairly large for anchoring effects).

12 Again, this observation holds for any figurative processing/comprehension account, not just relevance theory.

13 Indeed, such a contextless interpretation may not even exist. See Gibbs & Colston (2012) for lengthy arguments on this.

14 It is fair to say, though, that a *range* of abilities in recognizing these constraints and affordances likely would hold across people.

15 A concrete analogue would be transportation systems built in older cities. Initially, as goods and people were transported mostly by human or animal hand and foot or watercraft, paths and the built world were arranged accordingly. As mechanized transport appeared, first railroads, bicycles, and then automobiles, buses, trucks, and so on, the older infrastructure had to adapt but did not entirely lose the functionality of the earlier systems. With more modern transportation, underground and elevated trains, high-speed limited-access roads, and flight, still further adaptation was needed but also did not entirely supplant earlier means and their structures.

16 Such hierarchies hold for other social species as well, but hierarchies and their nuances may be particularly complex in primates.

17 They, of course, also can occasionally ramp up hostilities, for instance, if a misunderstanding cascades rapidly.

18 Positive results were found on four of the five primary personality traits, with neuroticism trending in the predicted direction but not reaching statistical significance.

19 Recall Ritchie's model of metaphor comprehension discussed in Chapter 4, in which a person's interpretation of a metaphor such as "My job is a jail" differs depending on the nature of the preceding discourse – the job resulting as a form of punishment versus a lack of mobility (Ritchie 2004a, b).

20 I have jokingly referred to it as "Meaning in concentrate: Just add brain."

REFERENCES

Adams Jr., R. B., Rule, N. O., Franklin Jr., R. G., Wang, E., Stevenson, M. T., Yoshikawa, S., Nomura, M., Sato, W., Kveraga, K., & Ambady, N.. (2010). Cross-cultural reading the mind in the eyes: An fMRI investigation. *Journal of Cognitive Neuroscience* 22(1), 97–108.

Amit, E., Algom, D., & Trope, Y. (2009). Distance-dependent processing of pictures and words. *Journal of Experimental Psychology: General* 138(3), 400–15.

Anderson, C., & Galinsky, A. D. (2006). Power, optimism, and risk-taking. *European Journal of Social Psychology* 34(6), 511–36.

Anderson, C., Kraus, M. W., Galinsky, A. D., & Keltner, D. (2012). The local-ladder effect: Social status and subjective well-being. *Psychological Science* 23(7), 764–71.

Andone, C. (2013). *Argumentation in Context*. Vol. 5: *Argumentation in Political Interviews*. Amsterdam: Benjamins.

Anolli, L., Ciceri, R., & Infantino, M. G. (2002). From "blame by praise" to "praise by blame": Analysis of vocal patterns in ironic communication. *International Journal of Psychology* 37(5), 266–76.

Attardo, S. (2000). Irony as relevant inappropriateness. *Journal of Pragmatics* 32(6), 793–826.

Austin, J. L. (1961). The meaning of a word. In J. O. Urmson & G. J. Warnock (eds.), *Philosophical Papers of J. L. Austin* (pp. 23–43). Oxford University Press.

Averbeck, J. M., & Hample, D. (2008). Ironic message production: How and why we produce ironic messages. *Communication Monographs* 75(4), 396–410.

Bar-Anan, Y., Liberman, N., & Trope, Y. (2006). The association between psychological distance and construal level: Evidence from an implicit association test. *Journal of Experimental Psychology: General* 135(4), 609–22.

Barlow, J. M., Kerlin, J. R., & Pollio, H. R. (1971). *Training Manual for Identifying Figurative Language: Metaphor Research Group*. Knoxville: University of Tennessee Press.

Barr, D. J. (1999). A theory of dynamic coordination for conversational interaction. Unpublished Ph.D. thesis, University of Chicago.

Barr, D. J., & Keysar, B. (2002). Anchoring comprehension in linguistic precedents. *Journal of Memory and Language* 46(2), 391–418.

(2005). Making sense of how we make sense: The paradox of egocentrism in language use. In H. L. Colston & A. N. Katz (eds.), *Figurative Language Comprehension: Social and Cultural Influences* (pp. 21–42). Hillsdale, NJ: Erlbaum.

Bartlett, F. C. (1932). *Remembering: A Study in Experimental and Social Psychology*. Cambridge University Press.

Bergen, B. K. (2012). *Louder than Words: The New Science of How the Mind Makes Meaning*. New York: Basic Books.

Bjork, R. A. (1994). Memory and metamemory considerations in the training of human beings. In J. Metcalfe & A. Shimamura (eds.), *Metacognition: Knowing about knowing* (pp. 185–205). Cambridge, MA: MIT Press.

Blankenship, K. L. (2005). The role of different markers of linguistic powerlessness in persuasion. *Journal of Language and Social Psychology* 24(1), 3–24.

(2006). Rhetorical question use and resistance to persuasion: An attitude strength analysis. *Journal of Language and Social Psychology* 25(2), 111–28.

Blankenship, K. L, & Craig, T. Y. (2006). Rhetorical question use and resistance to persuasion: An attitude strength analysis. *Journal of Language and Social Psychology*, 25, 111–28.

Blankenship, K. L., & Holtgraves, T. (2005). The role of different markers of linguistic powerlessness in persuasion. *Journal of Language and Social Psychology*, 24, 3–24.

Bloomfield, L. (1933). *Language*. New York: Holt & Company.

Boerger, M. A. (2005). Variations in figurative language use as a function of mode of communication. *Journal of Psycholinguistic Research* 34(1), 31–49.

Bolinger, D. (1950). Rime, assonance, and morpheme analysis. *Word* 6, 117–36.

Boroditsky, L., Fuhrman, O., & McCormick, K. (2010). Do English and Mandarin speakers think about time differently? *Cognition* 118(1), 123–9.

Boroditsky, L., & Ramscar, M. (2002). The roles of body and mind in abstract thought. *Psychological Science* 13(2), 185–9.

Bosco, F. M., Vallana, M., & Bucciarelli, M. (2012). The inferential chain makes the difference between familiar and novel figurative expressions. *Journal of Cognitive Psychology* 24(5), 525–40.

Bott, L., & Noveck, I. A. (2004). Some utterances are underinformative: The onset and time course of scalar inferences. *Journal of Memory and Language* 51(3), 437–57.

Botvinick, M. M., Braver, T. S., Barch, D. M., Carter, C. S., & Cohen, J. D. (2001). Conflict monitoring and cognitive control. *Psychological Review* 108(3), 624–52.

Botvinick, M., & Cohen, J. (1998). Rubber hands "feel" touch that eyes see. *Nature*, 391(6669), 756–756.

Bower, G. H., & Morrow, D. G. (1990). Mental models in narrative comprehension. *Science* 247(4938), 44–8.

Bowers, K., S., Regehr, G., Balthazard, C., & Parker, K. (1990). Intuition in the context of discovery. *Cognitive Psychology* 22(1), 72–110.

Bowes, A., & Katz, A. (2011). When sarcasm stings. *Discourse Processes* 48(4), 215–36.

Boylan, J., & Katz, A. N. (2013). Ironic expression can simultaneously enhance and dilute perception of criticism. *Discourse Processes* 50(3), 187–209.

Brinol, P., Petty, R. E., Valle, C., Rucker, D. D., & Becerra, A. (2007). The effects of message recipients' power before and after persuasion: A self-validation analysis. *Journal of Personality and Social Psychology* 93(6), 1040–53.

Brown, P., & Levinson, S. (1987). *Politeness: Some Universals in Language*. Cambridge University Press.

Brown, R. (1958). *Words and Things*. New York: Free Press.

Brown, R. W., Black, A. H., & Horowitz, A. E. (1955). Phonetic symbolism in natural languages. *Journal of Abnormal and Social Psychology* 50(3), 388.

Bryant, G. A. (2010). Prosodic contrasts in ironic speech. *Discourse Processes* 47(7), 545–66.

(2011). Verbal irony in the wild. *Pragmatics & Cognition* 19(2), 291–309.

Bryant, G. A., & Fox Tree, J. E. (2002). Recognizing verbal irony in spontaneous speech. *Metaphor and Symbol* 17(2), 99–119.

(2005). Is there an ironic tone of voice? *Language and Speech* 48(3), 257–77.

Burg, A., O'Keefe, D., & Schaffer, J. (writers), & Ackerman, A. (director). (1997). The strike [television series episode]. In A. Berg, J. Schaffer, J. Seinfeld, G. Shapiro & H. West (producers), *Seinfeld*. Los Angeles, CA: Castle Rock Entertainment.

Burgers, C., van Mulken, M., & Schellens, P. J. (2011). Finding irony: An introduction of the verbal irony procedure (VIP). *Metaphor and Symbol* 26(3), 186–205.

Burgers, C. F., van Mulken, M. J. P., & Schellens, P. J. (2013). On irony, images and creativity: A corpus-analytic approach. In T. Veale, K. Feyaerts, & C. J. Forceville (eds.), *Creativity and the Agile Mind: A Multidisciplinary Approach to a Multifaceted Phenomenon* (pp. 293–311). Berlin: de Gruyter.

Burns, Z. C., Caruso, E. M., & Bartels, D. M. (2012). Predicting premeditation: Future behavior is seen as more intentional than past behavior. *Journal of Experimental Psychology: General* 141(2), 227–32.

Cameron, L. (1999). Operationalising "metaphor" for applied linguistic research. In G. Low & L. Cameron (eds.), *Researching and Applying Metaphor* (pp. 3–28). Cambridge University Press.

(2003). *Advances in Applied Linguistics: Metaphor in Educational Discourse*. London: Continuum.

Campbell, J. D., & Katz, A. N. (2012). Are there necessary conditions for inducing a sense of sarcastic irony? *Discourse Processes* 49(6), 459–80.

Canton, N., Gale, B., Kennedy, K., Marshall, F., & Spielberg, S. (producers) & Zemeckis, R. (director). (1985). *Back to the Future* [motion picture]. Los Angeles, CA: Universal Pictures.

Carston, R. (1998). Informativeness, relevance, and scalar implicature. In R. Carston & S. Uchida (eds.), *Relevance Theory: Applications and Implications*. Amsterdam: Benjamins.

Carston, R., & Wearing, C. (2011). Metaphor, hyperbole and simile: A pragmatic approach. *Language and Cognition* 3(02), 283–312.

Carter, C. S., Braver, T. S., Barch, D. M., Botvinick, M. M., Noll, D., & Cohen, J. D. (1998). Anterior cingulate cortex, error detection, and the online monitoring of performance. *Science* 280(5364), 747–9.

Carter, R. (2004). *Language and Creativity: The Art of Common Talk*. New York: Routledge.

Caruso, E. M., Gilbert, D. T., & Wilson, T. D. (2008). A wrinkle in time: Asymmetric valuation of past and future events. *Psychological Science* 19(8), 796–801.

Caruso, E. M., & Gino, F. (2011). Blind ethics: Closing one's eyes polarizes moral judgments and discourages dishonest behavior. *Cognition* 118(2), 280–5.

Caruso, E. M. & Shafir, E. (2006). Now that I think about it, I'm in the mood for laughs: Decisions focused on mood. *Journal of Behavioral Decision Making* 19(2), 155–69.

Caruso, E. M., Waytz, A., & Epley, N. (2010). The intentional mind and the hot hand: Perceiving intentions makes streaks seem likely to continue. *Cognition* 116(1), 149–53.

Caucci, G. M., & Kreuz, R. J. (2012). Social and paralinguistic cues to sarcasm. *HUMOR: International Journal of Humor Research* 25(1), 1–22.

Chettih, S., Durgin, F. H., & Grodner, D. J. (2012). Mixing metaphors in the cerebral hemispheres: What happens when careers collide? *Journal of Experimental Psychology: Learning, Memory, and Cognition* 38(2), 295.

Clapton, E. P. (1977). Wonderful tonight. On *Slowhand* [vinyl recording]. London: RSO Records.

Claridge, C. (2011). *Hyperbole in English: A Corpus-Based Study of Exaggeration*. New York: Cambridge University Press.

Clark, H. H. (1977). Inferences in comprehension. In D. Laberge & S. Samuels (eds.), *Basic Processes in Reading: Perception and Comprehension* (pp. 245–63). Hillsdale, NJ: Erlbaum.

(1983). Making sense of nonce sense. In G. B. Flores D'Arcais & R. J. Jarvella (eds.), *The Process of Language Understanding* (pp. 297–331). New York: Wiley.

(1996). *Using Language*. Cambridge University Press.

Clark, H. H., & Gerrig, R. J. (1984). On the pretense theory of irony. *Journal of Experimental Psychology: General* 113(1), 121–6.

(2007). On the pretense theory of irony. In R. W. Gibbs & H. L. Colston (eds.), *Irony in Language and Thought: A Cognitive Science Reader* (pp. 25–33). Hillsdale, NJ: Erlbaum.

Clark, H. H., & Marshall, C. R. (1981). Definite reference and mutual knowledge. In A. K. Joshi, B. Webber, & I. A. Sag (eds.), *Elements of Discourse Understanding* (pp. 10–63). Cambridge University Press.

Clark, H. H., Schreuder, R., & Buttrick, S. (1983). Common ground and the understanding of demonstrative reference. *Journal of Verbal Learning and Verbal Behavior* 22(2), 245–58.

Clark, H. H., & Wilkes-Gibbs, D. (1986). Referring as a collaborative process. *Cognition* 22(1), 1–39.

Claymore. (2005). *SBC/Yahoo! Wonderful Tonght* [video file]. Available at: http://adland.tv/commercials/sbc-yahoo-wonderful-tonight-2005-030-usa.

Climie, E. A., & Pexman, P. M. (2008). Eye gaze provides a window on children's understanding of verbal irony. *Journal of Cognition and Development* 9(3), 257–85.

Cokely, E. T., & Feltz, A. (2009). Individual differences, judgment biases, and theory-of-mind: Deconstructing the intentional action side effect asymmetry. *Journal of Research in Personality* 43(1), 18–24.

Colston, H. L. (1997). "I've never seen anything like it": Overstatement, understatement and irony. *Metaphor and Symbol* 12(1), 43–58.

(1999). The pragmatic functions of rebuttal analogy. *Metaphor and Symbol* 14(4), 259–80.
(2000a). "Dewey defeats Truman": Interpreting ironic restatement. *Journal of Language and Social Psychology* 19(1), 44–63.
(2000b). On necessary conditions for verbal irony comprehension. *Pragmatics & Cognition* 8(2), 277–324.
(2002a). Contrast and assimilation in verbal irony. *Journal of Pragmatics* 34(2), 111–42.
(2002b). Pragmatic justifications for nonliteral gratitude acknowledgments: "Oh sure, anytime." *Metaphor and Symbol* 17(3), 205–26.
(2005). Social and cultural influences on figurative and indirect language. In H. Colston & A. Katz (eds.), *Figurative Language Comprehension: Social and Cultural Influences* (pp. 99–130). Hillsdale, NJ: Erlbaum.
(2007). What figurative language development reveals about the mind. In A. C. Schalley & D. Khlentzos (eds.), *Mental States*, Vol. 2: *Language and Cognitive Structure* (pp. 191–212). Amsterdam: Benjamins.
(2008). A new look at common ground: Memory, egocentrism, and joint meaning. In I. Kecskes & J. Mey (eds.), *Intention, Common Ground, and the Egocentric Speaker-Hearer* (pp. 151–88). New York: de Gruyter.
(2009). Figurative pragmatics: From structure to social status. In K. Turner & B. Fraser (eds.), *Language in Life, and a Life in Language: Jacob Mey, a Festschrift* (pp. 49–56). Bingley, UK: Emerald Group.
(2010). Irony, analogy and truth. In B. Nerlich & A. Burkhardt (eds.), *Tropical Truth(s): The Epistemology of Metaphor and Other Tropes* (pp. 339–54). Berlin: de Gruyter.
(2014). Complexities of pragmatic effects in blended figures: The case of metaphtonymy. Paper presented at the First International Symposium on Figurative Thought and Language, Thessaloniki, Greece.
(2015). Irony performance and perception: Motivations underlying use and comprehension. Paper presented at the International Cognitive Linguistics Association, Newcastle, United Kingdom.

Colston, H. L., & Brooks, E. N. (2008). Pragmatic effects of metonymy. Poster session presented at the meeting of the Association for Psychological Science, Chicago.

Colston, H. L., & Connelly, C. (2004). Figurative language and composure display. Poster session presented at the meeting of the Midwestern Psychological Association, Chicago.

Colston, H. L., & Gibbs, R. W. (1998). Analogy and irony: Rebuttal to "rebuttal analogy." *Metaphor and Symbol* 13(1), 69–75.
(2002). Are irony and metaphor understood differently? *Metaphor and Symbol* 17(1), 57–80.
(2007). A brief history of irony. In R. W. Gibbs & H. L. Colston (eds.), *Irony in Language and Thought: A Cognitive Science Reader* (pp. 3–34). Hillsdale, NJ: Erlbaum.

Colston, H. L., & Jindrich, P. L. (2000). "Been there, done that": Comprehending asyndeton. Poster session presented at the meeting of the American Psychological Society, Miami, FL.

Colston, H. L., & Katz, A. N. (2005). *Figurative Language Comprehension: Social and Cultural Influences*. Hillsdale, NJ: Erlbaum.

Colston, H. L., & Keller, S. B. (1998). You'll never believe this: Irony and hyperbole in expressing surprise. *Journal of Psycholinguistic Research* 27(4), 499–513.

Colston, H. L., & Kinney, E. (2015). Producing figurative pragmatic effects: Endings justifying meanings. Paper presented at the International Cognitive Linguistics Conference, Newcastle, United Kingdom.

Colston, H. L., & Kodet, A. (2008). Embodiment in word meanings. Poster session presented at the meeting of the Midwestern Psychological Association, Chicago.

Colston, H. L., & Lee, S. Y. (2004). Gender differences in verbal irony use. *Metaphor and Symbol* 19(4), 289–306.

Colston, H. L., & O'Brien, J. (1998). Contrast effects in the pragmatic accomplishments of irony and understatement. Poster session presented at the meeting of the American Psychological Society, Washington, DC.

(2000a). Contrast and pragmatics in figurative language: Anything understatement can do, irony can do better. *Journal of Pragmatics* 32(11), 1557–83.

(2000b). Contrast of kind versus contrast of magnitude: The pragmatic accomplishments of irony and hyperbole. *Discourse Processes* 30(2), 179–99.

Colston, H. L., & Peitz, S. L. (2000). See no evil, hear no evil, speak no evil: Comprehension of phatic disbelief expressions. Poster session presented at the meeting of the Midwestern Psychological Association, Chicago.

Cordova, D. I., & Lepper, M. R. (1996). Intrinsic motivation and the process of learning: Beneficial effects of contextualization, personalization, and choice. *Journal of Educational Psychology* 88(4), 715.

Corts, D. P. (2006). Factors characterizing bursts of figurative language and gesture in college lectures. *Discourse Studies* 8(2), 211–33.

Corts, D. P., & Meyers, K. (2002). Conceptual clusters in figurative language production. *Journal of Psycholinguistic Research* 31(4), 391–408.

Corts, D. P., & Pollio, H. R. (1999). Spontaneous production of figurative language and gesture in college lectures. *Metaphor and Symbol* 14(2), 81–100.

Coulson, S. (2001). *Semantic Leaps: Frame-Shifting and Conceptual Blending in Meaning Construction*. Cambridge University Press.

(2008a). Framing and blending in persuasive discourse. In Rema Rossini Favretti (ed.), *Frames, Corpora, and Knowledge Representation* (pp. 33–42). Bologna: B ononia University Press.

(2008b). Metaphor comprehension and the brain. In R.W. Gibbs (ed.), *Metaphor and Thought*, 3rd ed. Cambridge University Press.

Coulson, S., & Oakley, T. (2000). Blending basics. *Cognitive Linguistics* 11(3–4), 175–96.

(2005). Blending and coded meaning: Literal and figurative meaning in cognitive semantics. *Journal of Pragmatics* 37(10), 1510–36.

Covington, M., & Curry, M. (2008). A brief history of putting lipstick on a pig. *Time Magazine* 172(9).

Cowan, A., David, L., & Seinfeld, J. (writers) & Cherones, T. (director). (1994). The opposite [television series episode]. In L. David, G. Shapiro, & H. West (producers), *Seinfeld*. Los Angeles, CA: Castle Rock Entertainment.

Craig, T. Y., & Blankenship, K. L. (2011). Language and persuasion: Linguistic extremity influences message processing and behavioral intentions. *Journal of Language and Social Psychology* 30(3), 290–310.

Crystal, D. (1997). *The Cambridge Encyclopedia of the English Language*. Cambridge University Press.

Culpeper, J. (2011). *Studies in Interactional Sociolinguistics*. Vol. 28: *Impoliteness: Using Language to Cause Offence*. Cambridge University Press.

Cushing, H., D'Cruz, J., & Gay-Rees, J. (producers) & Banksy (director). (2010). *Exit Through the Gift Shop* [motion picture]. London: Paranoid Pictures.

Dascal, M. (2003). *Interpretation and Understanding*. Amsterdam: Benjamins.

David, L., Seinfeld, J., Cowan, A. (writers), & Cherones, T. (director). (1994). The Opposite [television series episode]. In T. Gammill, M. Pross, & J. Seinfeld (producers), *Seinfeld*. Los Angelis, CA: Castle Rock Entertainment.

De Neys, W., & Schaeken, W. (2007). When people are more logical under cognitive load. *Experimental Psychology* 54(2), 128–33.

De Saussure, L. (2013). Background relevance. *Journal of Pragmatics* 59, 178–89.

Demorest, A., Silberstein, L., Gardner, H., & Winner, E. (1983). Telling it as it isn't: Children's understanding of figurative language. *British Journal of Developmental Psychology* 1(2), 121–34.

Dews, S., & Winner, E. (1995). Muting the meaning a social function of irony. *Metaphor and Symbolic Activity* 10(1), 3–19.

Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin* 125(2), 276–302.

Edwards, D. (2000). Extreme case formulations: Softeners, investment, and doing nonliteral. *Research on Language & Social Interaction* 33(4), 347–73.

Epley, N., & Caruso, E. M. (2004). Egocentric ethics. *Social Justice Research* 17(2), 171–87.

Epley, N., Caruso, E., & Bazerman, M. H. (2006). When perspective taking increases taking: Reactive egoism in social interaction. *Journal of Personality and Social Psychology* 91(5), 872–89.

Epley, N., Keysar, B., Van Boven, L., & Gilovich, T. (2004). Perspective taking as egocentric anchoring and adjustment. *Journal of Personality and Social Psychology* 87(3), 327–39.

Eugenides, J. (2011). *The Marriage Plot*. New York: Farrar, Straus & Giroux.

Fass, D. (1991). Met*: A method for discriminating metonymy and metaphor by computer. *Computational Linguistics* 17(1), 49–90.

Fast, N. J., Gruenfeld, D. H., Sivanathan, N., & Galinsky, A. D. (2009). Illusory control: A generative force behind power's far-reaching effects. *Psychological Science* 20(4), 502–8.

Fauconnier, G., & Turner, M. (1998). Conceptual integration networks. *Cognitive Science* 22(2), 133–87.

(2002). *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities*. New York: Basic Books.

Fausey, C. M., & Boroditsky, L. (2010). Subtle linguistic cues influence perceived blame and financial liability. *Psychonomic Bulletin & Review* 17(5), 644–50.

Fausey, C. M., & Matlock, T. (2011). Can grammar win elections? *Political Psychology* 32(4), 563–74.

Feldhaus, R. O., & Honeck, R. P. (1989). The conceptual basis of graded categories. *Journal of Psycholinguistic Research* 18(3), 271–88.
Ferré, G. (2014). Multimodal hyperbole. *Multimodal Communication* 3(1), 25–50.
Festinger, L. (1954). A theory of social comparison processes. *Human Relations* 7(2), 117–40.
Filik, R. (2008). Contextual override of pragmatic anomalies: Evidence from eye movements. *Cognition* 106(2), 1038–46.
Filik, R., Leuthold, H., Wallington, K., & Page, J. (2014). Testing theories of irony processing using eye-tracking and ERPs. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 40(3), 811–28.
Filik, R., & Moxey, L. M. (2010). The online processing of written irony. *Cognition* 116(3), 421–36.
Firth, A. (1996). The discursive accomplishment of normality: On "lingua franca" English and conversation analysis. *Journal of Pragmatics* 26(2), 237–59.
Forgas, J. P., & Williams, K. D. (2001). *The Sydney Symposium of Social Psychology: Social Influence—Direct and Indirect Processes*. Philadelphia: Taylor & Francis.
Foster, W. (writer), & Freleng, F. (director). (1955). Hare brush [television series episode]. In E. Selzer (producer), *Looney Tunes*. Los Angeles, CA: Warner Brothers.
Friesen, G., & Meyer, A. (producers), & Hughes, J. (director). (1985). *The Breakfast Club* [motion picture]. Los Angeles, CA: Universal Pictures.
Frith, C. D., & Frith, U. (2006). The neural basis of mentalizing. *Neuron* 50(4), 531–4.
Furthman, J. (producer), & von Sternberg, J. (director). (1957). *Jet Pilot* [motion picture]. Los Angeles, CA: RKO Radio Pictures.
Fussell, S. R., & Krauss, R. M. (1989a). The effects of intended audience on message production and comprehension: Reference in a common ground framework. *Journal of Experimental Social Psychology* 25(3), 203–19.
(1989b). Understanding friends and strangers: The effects of audience design on message comprehension. *European Journal of Social Psychology* 19(6), 509–25.
Galinsky, A. D., Gruenfeld, D. H., & Magee, J. C. (2003). From power to action. *Journal of Personality and Social Psychology* 85(3), 453–66.
Galinsky, A. D., Magee, J. C., Ena Inesi, M., & Gruenfeld, D. H. (2006). Power and perspectives not taken. *Psychological Science* 17(12), 1068–74.
Galinsky, A. D., Magee, J. C., Gruenfeld, D. H., Whitson, J. A., & Liljenquist, K. A. (2008). Power reduces the press of the situation: Implications for creativity, conformity, and dissonance. *Journal of Personality and Social Psychology* 95(6), 1450–66.
Garnham, A. (1982). Testing psychological theories about inference making. *Memory & Cognition* 10(4), 341–9.
Gehring, W. J., & Knight, R. T. (2000). Prefrontal–cingulate interactions in action monitoring. *Nature Neuroscience* 3(5), 516–20.
Gelbart, L., & Marks, L. (writers), & Cooper, J. (director). (1973). The incubator [television series episode]. In L. Gelbart, B. Metcalfe, & G. Reynolds (producers), *M*A*S*H*. Los Angeles, CA: 20th Century Fox Television.
Gerrig, R. J. (1989). Suspense in the absence of uncertainty. *Journal of Memory and Language* 28(6), 633–48.

Gibbs, R. W. (1981a). Memory for requests in conversation. *Journal of Verbal Learning and Verbal Behavior* 20(6), 630–40.
(1981b). Your wish is my command: Convention and context in interpreting indirect requests. *Journal of Verbal Learning and Verbal Behavior* 20(4), 431–44.
(1983). Do people always process the literal meanings of indirect requests? *Journal of Experimental Psychology: Learning, Memory, and Cognition* 9(3), 524.
(1986a). Skating on thin ice: Literal meaning and understanding idioms in conversation. *Discourse Processes* 7, 17–30.
(1986b). What makes some indirect speech acts conventional? *Journal of Memory and Language* 25, 181–96.
(1987). Memory for requests in conversation revisited. *American Journal of Psychology* 100, 179–91.
(1993). Process and products in making sense of tropes. In A. Ortony (ed.), *Metaphor and Thought*, 2nd ed. New York: Cambridge University Press.
(1994). *The Poetics of Mind: Figurative Thought, Language, and Understanding*. New York: Cambridge University Press.
(1999). Speakers' intuitions and pragmatic theory. *Cognition* 69, 355–9.
(2000). Irony in talk among friends. *Metaphor and Symbol* 15, 5–27.
(2002). A new look at literal meaning in understanding what is said and implicated. *Journal of Pragmatics* 34, 457–86.
(2003a). Embodiment and linguistic meaning. *Brain and Language* 84, 1–15.
(2003b). Embodied standing and the psychological semantics of stand. In J. Newman (ed.), *The Linguistics of Standing, Lying, and Sitting*. Amsterdam: Benjamins.
(2005). Review of M. Dascal "Interpretation and understanding." *Pragmatics & Cognition* 13, 405–13.
(2006a). *Embodiment and Cognitive Science*. New York: Cambridge University Press.
(2006b). Metaphor interpretation as embodied simulation. *Mind & Language* 21, 434–58.
(2007). Experimental tests of figurative meaning construction. In G. Radden, K-M. Kopcke, T. Berg, & P. Siemund (eds.), *Aspects of Meaning Construction* (pp. 19–32). Amsterdam, Benjamins.
(2011a). Evaluating conceptual metaphor theory. *Discourse Processes* 48, 529–62.
(2011b). Multiple constraints on theories of metaphor. *Discourse Processes* 48, 375–84.
(2012). Are ironic acts deliberate. *Journal of Pragmatics* 44(1), 104–15.
Gibbs, R. W., & Bryant, G. A. (2008). Striving for optimal relevance when answering questions. *Cognition* 106(1), 345–69.
Gibbs, R. W., Bryant, G. A., & Colston, H. L. (2014). Where is the humor in verbal irony? *International Journal of Humor Research*, 27(4), 575–596.
Gibbs, R. W., & Colston, H. (2002). The risks and rewards of ironic communication. In L. Anolli, R. Ciceri, & G. Riva (eds.), *Say Not to Say: New Perspectives on Miscommunication* (pp. 181–94). Amsterdam: IOS Press.
(2006). Figurative language. In M. Traxler & M. Gernsbacher (eds.), *Handbook of Psycholinguistics*, 2nd ed. (pp. 835–62). Oxford, UK: Elsevier.

(2007a). *Irony in Language and Thought: A Cognitive Science Reader*. New York: Taylor & Francis.

(2007b). Psycholinguistic aspects of phraseology: American tradition. In H. Burger, D. Dobrovolskij, P. Kuhn, & N. Norrick. (eds.), *Phraseologie/Phraseology: An International Handbook of Contemporary Research*. New York: de Gruyter.

(2012). *Interpreting Figurative Meaning*. New York: Cambridge University Press.

Gibbs, R. W., & Izett, C. D. (2005). Irony as persuasive communication. In H. Colston & A. Katz (eds.), *Figurative Language Comprehension: Social and Cultural Influences* (pp. 131–52). Mahway, NJ: Erlbaum.

Gibbs, R. W., & Kearney, L. R. (1994). When parting is such sweet sorrow: The comprehension and appreciation of oxymora. *Journal of Psycholinguistic Research* 23(1), 75–89.

Gibbs, R. W., & McCarrell, N. S. (1990). Why boys will be boys and girls will be girls: Understanding colloquial tautologies. *Journal of Psycholinguistic Research* 19(2), 125–45.

Gibbs, R. W., & Mueller, R. A. G. (1988). Conversational sequences and preference for indirect speech acts. *Discourse Processes* 11(1), 101–16.

Gibbs, R. W., Costa Lima, P. L., & Francozo, E. (2004). Metaphor is grounded in embodied experience. *Journal of Pragmatics* 36(7), 1189–210.

Gibbs, R. W., Leggitt, J. S., & Turner, E. A. (2002). What's special about figurative language in emotional communication? In S. R. Frussel (ed.), *The Verbal Communication of Emotions: Interdisciplinary Perspectives* (pp. 125–49). Oxon, UK: Erlbaum.

Gibbs, R. W., Nayak, N. P., & Cutting, C. (1989). How to kick the bucket and not decompose: Analyzability and idiom processing. *Journal of Memory and Language* 28(5), 576–93.

Gibbs, R. W., & Tendahl, M. (2006). Cognitive effort and effects in metaphor comprehension: Relevance theory and psycholinguistics. *Mind & Language* 21(3), 379–403.

(2011). Coupling of metaphoric cognition and communication: A reply to Deirdre Wilson. *Intercultural Pragmatics* 8(4); available at: http://www.degruyter.com/view/j/iprg.2011.8.issue-4/iprg.2011.027/iprg.2011.027.xml.

Gibbs, R. W., & Van Orden, G. (2012). Pragmatic choice in conversation. *Topics in Cognitive Science* 4(1), 7–20.

Gil, J. M. (2011). Relevance theory and unintended transmission of information. *Intercultural Pragmatics* 8(1), 1–40.

Giora, R. (2003). *On Our Mind: Salience, Context, and Figurative Language*. New York: Oxford University Press.

Giora, R., Fein, O., Ganzi, J., Levi, N. A., & Sabah, H. (2005). On negation as mitigation: The case of negative irony. *Discourse Processes* 39(1), 81–100.

Giora, R., Livnat, E., Fein, O., Barnea, A., Zeiman, R., & Berger, I. (2013). Negation generates nonliteral interpretations by default. *Metaphor and Symbol* 28(2), 89–115.

Glenberg, A. M., & Kaschak, M. P. (2002). Grounding language in action. *Psychonomic Bulletin & Review* 9(3), 558–65.

Glucksberg, S., & Keysar, B. (1990). Understanding metaphorical comparisons: Beyond similarity. *Psychological Review* 97(1), 3.

Goatly, A. (1997). *The Language of Metaphors*. London: Routledge.

Goldberg, D., Medjuck, J., & Reitman, I. (producers), & Reitman, I. (director). (1981). *Stripes* [motion picture]. Los Angeles, CA: Columbia Pictures.

Grady, J. E., Oakley, T., & Coulson, S. (1999). Blending and metaphor. In R. W. Gibbs & G. J. Steen (eds.), *Metaphor in Cognitive Linguistics: Selected Papers from the Fifth International Cognitive Linguistics Conference, Amsterdam, 1997* (pp. 101–24). Amsterdam: Benjamins.

Graesser, A. C. (1981). *Prose Comprehension Beyond the Word*. New York: Springer.

Graesser, A. C., & Clark, L. F. (1985). *Advances in Discourse Processes Series*. Vol. 17: *Structures and Procedures of Implicit Knowledge*. Westport, CT: Ablex.

Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology* 96(5), 1029–46.

Greene, J. D., Sommerville, R. B., Nystrom, L. E., Darley, J. M., & Cohen, J. D. (2001). An fMRI investigation of emotional engagement in moral judgment. *Science* 293(5537), 2105–8.

Greene, S. B., Gerrig, R. J., McKoon, G., & Ratcliff, R. (1994). Unheralded pronouns and management by common ground. *Journal of Memory and Language* 33(4), 511–26.

Grice, H. P. (1968). Utterer's meaning, sentence-meaning, and word-meaning. *Foundations of Language* 4, 225–42.

(1975). Logic and conversation. In P. Cole & J. L. Morgan (eds.), *Speech Acts*. Vol. 3: *Syntax and Semantics* (pp. 225–42). New York: Seminar Press.

Gruenfeld, D. H., Inesi, M. E., Magee, J. C., & Galinsky, A. D. (2008). Power and the objectification of social targets. *Journal of Personality and Social Psychology* 95(1), 111–27.

Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review* 108(4), 841–44.

Hajcak, G., Moser, J. S., Holroyd, C. B., & Simons, R. F. (2006). The feedback-related negativity reflects the binary evaluation of good versus bad outcomes. *Biological Psychology* 71(2), 148–54.

Hamlin, J. K., Wynn, K., & Bloom, P. (2007). Social evaluation by preverbal infants. *Nature* 450(7169), 557–9.

Hancock, J. T. (2004). Verbal irony use in face-to-face and computer-mediated conversations. *Journal of Language and Social Psychology* 23(4), 447–63.

Hanna, S. (2011). Awareness in metaphor understanding: "The Lingering of the Literal." *Review of Cognitive Linguistics* 9(1), 65–82.

Harris, M. Friel, B., Mickelson, & Rett, N. (2006). Attribution of discourse goals for using concrete- and abstract-tenor metaphors and similes with or without discourse context. *Journal of Pragmatics* 38(6), 863–79.

Harris, M., & Pexman, P. M. (2003). Children's perceptions of the social functions of verbal irony. *Discourse Processes* 36(3), 147–65.

Harris, R. J., & Mosier, N. J. (1999). Memory for metaphors and similes in discourse. *Discourse Processes* 28(3), 257–70.

Haslam, N., Loughnan, S., & Sun, P. (2011). Beastly: What makes animal metaphors offensive? *Journal of Language and Social Psychology* 30(3), 311–25.

Helzer, E. G., Connor-Smith, J. K., & Reed, M. A. (2009). Traits, states, and attentional gates: Temperament and threat relevance as predictors of attentional bias to social threat. *Anxiety, Stress & Coping* 22(1), 57–76.

Helzer, E. G., & Pizarro, D. A. (2011). Dirty liberals! Reminders of physical cleanliness influence moral and political attitudes. *Psychological Science* 22(4), 517–22.

Hilpert, M. (2010). An empirical approach to the use and comprehension of mixed metaphors. *Review of Cognitive Linguistics* 8(1), 66–92.

Hirsh, J. B. (2010). The weight of being: Psychological perspectives on the existential moment. *New Ideas in Psychology* 28(1), 28–36.

Hirsh, J. B., Kang, S. K., & Bodenhausen, G. V. (2012). Personalized persuasion: Tailoring persuasive appeals to recipients' personality traits. *Psychological Science* 23(6), 578–81.

Holroyd, Clay B. & Coles, Michael G. H. (2002). The neural basis of human error processing: Reinforcement learning, dopamine, and the error-related negativity. *Psychological Review,* 109, 679–709.

Holtgraves, T. (1997). Styles of language use: Individual and cultural variability in conversational indirectness. *Journal of Personality and Social Psychology* 73(3), 624.

Honeck, R. P. (1997). *A Proverb in Mind: The Cognitive Science of Proverbial Wit and Wisdom*. Hillsdale, NJ: Erlbaum.

Horton, W. S., & Gerrig, R. J. (2005). The impact of memory demands on audience design during language production. *Cognition* 96(2), 127–42.

Horton, W. S., & Keysar, B. (1996). When do speakers take into account common ground? *Cognition* 59(1), 91–117.

Hsieh, S. C. (2006). A corpus-based study on animal expressions in Mandarin Chinese and German. *Journal of Pragmatics* 38(12), 2206–22.

Huang, L., Galinsky, A. D., Gruenfeld, D. H., & Guillory, L. E. (2011). Powerful postures versus powerful roles: Which is the proximate correlate of thought and behavior? *Psychological Science* 22(1), 95–102.

Inbar, Y., Pizarro, D. A., & Bloom, P. (2009). Conservatives are more easily disgusted than liberals. *Cognition & Emotion* 23(4), 714–25.

Inbar, Y., Pizarro, D. A., Knobe, J., & Bloom, P. (2009). Disgust sensitivity predicts intuitive disapproval of gays. *Emotion* 9(3), 435–9.

Inesi, M. E. (2010). Power and loss aversion. *Organizational Behavior and Human Decision Processes* 112(1), 58–69.

Inesi, M. E., Botti, S., Dubois, D., Rucker, D., & Galinski, A. D. (2011). Power and choice: Their dynamic interplay in quenching the thirst for personal control. *Psychological Science* 22(8), 1042–48.

Ishida, Y., & Abe, J. (2010). Is the victim of irony identified by echoic mention? *Shinrigaku Kenkyu: The Japanese Journal of Psychology* 80(6), 485–93.

Jacowitz, K. E., & Kahneman, D. (1995). Measures of anchoring in estimation tasks. *Personality and Social Psychology Bulletin* 21(11), 1161–6.

Johnson, B., Young, A., Young, M., Williams C., & Rudd, P. (1980). *Back in Black. On Back in Black* [CD]. New York: Albert/Atlantic Records.

Johnson, M. G., & Malgady, R. G. (1979). Some cognitive aspects of figurative language: Association and metaphor. *Journal of Psycholinguistic Research* 8(3), 249–65.

Kang, S. K., Hirsh, J. B., & Chasteen, A. L. (2010). Your mistakes are mine: Self-other overlap predicts neural response to observed errors. *Journal of Experimental Social Psychology* 46(1), 229–32.

Kasser, T., & Ryan, R. M. (1993). A dark side of the American dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology* 65(2), 410.

Katz, A. N. (1982). Metaphoric relationships: The role of feature saliency. *Journal of Psycholinguistic Research* 11(4), 283–96.

(2005). Discourse and sociocultural factors in understanding nonliteral language. In H. L. Colston & A. N. Katz (eds.), *Figurative Language Comprehension: Social and Cultural Influences* (pp. 183–208). Hillsdale, NJ: Erlbaum.

Katz, A. N., Blasko, D. G., & Kazmerski, V. A. (2004). Saying what you don't mean: Social influences on sarcastic language processing. *Current Directions in Psychological Science* 13(5), 186–9.

Katz, A. N., Lenhardt, M., & Mitchell, K. (2007). On acknowledging thanks for performing a favor. *Metaphor and Symbol* 22(3), 233–50.

Katz, A. N., & Pexman, P. M. (1997). Interpreting figurative statements: Speaker occupation can change metaphor to irony. *Metaphor and Symbol* 12(1), 19–41.

Kecskes, I. (2007). Synergic concepts in the bilingual mind. In I. Kecskes & L. Albertazzi (eds.), *Cognitive Aspects of Bilingualism* (pp. 29–61). Dordrecht, The Netherlands: Springer.

Kecskes, I., & Mey, J. (2008). *Mouton Series in Pragmatics*. Vol. 4: *Intention, Common Ground and the Egocentric Speaker-Hearer*. Berlin: de Gruyter.

Kecskes, I., & Papp, T. (2003). How to demonstrate the conceptual effect of L2 on L1? Methods and techniques In V. Cook (ed.), *Effects of the Second Language on the First* (pp. 247–65). Trowbridge, UK: Cromwell Press.

Keenan, E. L., & Li, C. N. (1976). Remarkable subjects in Malagasy. In *Subject and Topic* (pp. 247–301). New York: Academic Press.

Kerns, J. G., Cohen, J. D., MacDonald III, A. W., Cho, R. Y., Stenger, V. A., & Carter, Cameron S. (2004). Anterior cingulate conflict monitoring and adjustments in control. *Science* 303(5660), 1023–6.

Keysar, B. (1994). Discourse context effects: Metaphorical and literal interpretations. *Discourse Processes* 18(3), 247–69.

(2007). Communication and miscommunication: The role of egocentric processes. *Intercultural Pragmatics* 4(1). Available at: http://www.degruyter.com/view/j/iprg.2007.4.issue-1/ip.2007.004/ip.2007.004.xml.

(2008). Egocentric processes in communication and miscommunication. In I. Kecskes & J. Mey (eds.), *Mouton Series in Pragmatics*. Vol. 4: *Intention, Common Ground and the Egocentric Speaker-Hearer* (pp. 277–96). Berlin: de Gruyter.

Keysar, B., Barr, D. J., Balin, J. A., & Brauner, J. S. (2000). Taking perspective in conversation: The role of mutual knowledge in comprehension. *Psychological Science* 11(1), 32–8.

Keysar, B., Barr, D. J., & Paek, T. S. (1998). Definite reference and mutual knowledge: Process models of common ground in comprehension. *Journal of Memory and Language* 39(1), 1–20.

Keysar, B., & Bly, B. (1995). Intuitions of the transparency of idioms: Can one keep a secret by spilling the beans? *Journal of Memory and Language* 34(1), 89–109.

(1999). Swimming against the current: Do idioms reflect conceptual structure? *Journal of Pragmatics* 31(12), 1559–78.

Keysar, B., & Henly, A. S. (2002). Speakers' overestimation of their effectiveness. *Psychological Science* 13(3), 207–12.

Kimmel, M. (2008). Properties of cultural embodiment: Lessons from the anthropology of the body. In R. M. Frank, R. Dirven, T. Ziemke, & E. E. Bernardez (eds.), *Cognitive Linguistics Research: Body, Language, and Mind*. Vol. 2: *Sociocultural Situatedness* (pp. 77–108). Berlin: de Gruyter.

(2009). Metaphors of the EU constitutional debate: Ways of charting discourse coherence in a complex metaphor field. *Metaphorik.de* 17, 49–100.

(2010). Why we mix metaphors (and mix them well): Discourse coherence, conceptual metaphor, and beyond. *Journal of Pragmatics* 42(1), 97–115.

Kopp, R. R. (1995). *Metaphor Therapy: Using Client-Generated Metaphors in Psychotherapy*. Bristol, PA: Brunner/Mazel.

Kotthoff, H. (2002). Irony, quotation, and other forms of staged intertextuality: Double or contrastive perspectivation in conversation. In V. Kallmeyer (ed.), *Perspective and Perspectivation in Discourse* (pp. 201–30). Amsterdam: Benjamins.

(2003). Responding to irony in different contexts: On cognition in conversation. *Journal of Pragmatics* 35(9), 1387–411.

Kovaz, D., Kreuz, R. J., & Riordan, M. A. (2013). Distinguishing sarcasm from literal language: Evidence from books and blogging. *Discourse Processes* 50(8), 598–615.

Kovecses, Z. (2011). Recent developments in metaphor theory: Are the new views rival ones? *Review of Cognitive Linguistics* 9(1), 11–25.

Kowatch, K., Whalen, J. M., & Pexman, P. M. (2013). Irony comprehension in action: A new test of processing for verbal irony. *Discourse Processes* 50(5), 301–15.

Kraus, M. W., Cote, S., & Keltner, D. (2010). Social class, contextualism, and empathic accuracy. *Psychological Science* 21(11), 1716–23.

Krauss, R. M., & Fussell, S. R. (1991a). Constructing shared communicative environments. In L. B. Resnick, J. M. Levine, & S. D. Teasley (eds.), *Perspectives on Socially Shared Cognition* (pp. 172–200). Washington, DC: American Psychological Association.

(1991b). Perspective-taking in communication: Representations of others' knowledge in reference. *Social Cognition* 9(1), 2–24.

Kreuz, R. J. (2000). The production and processing of verbal irony. *Metaphor and Symbol* 15(1–2), 99–107.

Kreuz, R. J., & Glucksberg, S. (1989). How to be sarcastic: The echoic reminder theory of verbal irony. *Journal of Experimental Psychology: General* 118(4), 374.

Kreuz, R. J., Kassler, M. A., Coppenrath, L., & McLain Allen, B. (1999). Tag questions and common ground effects in the perception of verbal irony. *Journal of Pragmatics* 31(12), 1685–700.

Kreuz, R. J., & Link, K. E. (2002). Asymmetries in the use of verbal irony. *Journal of Language and Social Psychology* 21(2), 127–43.

Kreuz, R. J., Long, D. L., & Church, M. B. (1991a). On being ironic: Pragmatic and mnemonic implications. *Metaphor and Symbolic Activity* 6(3), 149–62.

(1991b). On being ironic: Pragmatic and mnemonic implications. *Metaphor and Symbolic Activity* 6(3), 149–62.

Kreuz, R. J., & Roberts, R. M. (1995). Two cues for verbal irony: Hyperbole and the ironic tone of voice. *Metaphor and Symbolic Activity* 10(1), 21–31.

Kumon-Nakamura, S., Glucksberg, S., & Brown, M. (1995). How about another piece of pie: The allusional pretense theory of discourse irony. *Journal of Experimental Psychology: General* 124(1), 3–21.

Kurtz, G. (producer), & Lucas, G. (director). (1977). *Star Wars: A New Hope* [motion picture]. Los Angeles, CA: Lucasfilm & Twentieth Century Fox Film Corporation.

Kwapil, J. M., Brey, V. A., & Colston, H. L. (2006). Register violations as a form of verbal irony. Poster session presented at the meeting of the Society for Text and Discourse, Minneapolis, MN.

Lakoff, G., & Johnson, M. (1980). *Metaphors We Live By*. University of Chicago Press.

Lakoff, G., & Turner, M. (1989). *More than Cool Reason: A Field Guide to Poetic Metaphor*. University of Chicago Press.

Lamm, R. W. (1970). Does anybody really know what time it is? On *The Chicago Transit Authority* [CD]. Chicago: Columbia Records.

Langer, E. J. (1975). The illusion of control. *Journal of Personality and Social Psychology* 32(2), 311.

Langer, E. J., & Rodin, J. (1976). The effects of choice and enhanced personal responsibility for the aged: A field experiment in an institutional setting. *Journal of Personality and Social Psychology* 34(2), 191–8.

Leach, E. (1964). Anthropological aspects of language: Animal categories and verbal abuse. In E. Lenneberg (ed.), *New Directions in the Study of Language* (pp. 23–63). Cambridge, MA: MIT Press.

Lee, C. J., & Katz, A. N. (1998). The differential role of ridicule in sarcasm and irony. *Metaphor and Symbol* 13(1), 1–15.

Legowski, T., & Brownlee, K. (2001). Working with metaphor in narrative therapy. *Journal of Family Psychotherapy* 12(1), 19–28.

Levinson, S. C. (2000). *Presumptive Meanings: The Theory of Generalized Conversational Implicature*. Cambridge, MA: MIT Press.

Levitt, H., Korman, Y., & Angus, L. (2000). A metaphor analysis in treatments of depression: Metaphor as a marker of change. *Counselling Psychology Quarterly* 13(1), 23–35.

Lieberman, M. D. (2010). Social cognitive neuroscience. *Handbook of Social Psychology*. Available at: http://onlinelibrary.wiley.com/doi/10.1002/9780470561119.socpsy001005/full.

Link, K. E., & Kreuz, R. J. (2005). Do men and women differ in their use of nonliteral language when they talk about emotions? In H. Colston & A. Katz

(eds.), *Figurative Language Comprehension: Social and Cultural Influences* (pp. 99–130). Hillsdale, NJ: Erlbaum.

Litovkina, A. T. (2009). Law is hell: Death and the afterlife in American lawyer jokes. *Acta Juridica Hungarica* 50(3), 311–28.

(2011). "Where there's a will there's a lawyer's bill": Lawyers in Anglo-American anti-proverbs. *Acta Juridica Hungarica* 52(1), 82–96.

Loftus, E. F. (1975). Leading questions and the eyewitness report. *Cognitive Psychology* 7(4), 560–72.

(1993). Psychologists in the eyewitness world. *American Psychologist* 48(5), 550–2.

(2003). Make-believe memories. *American Psychologist* 58(1), 867–73.

Loftus, E. F., Miller, D. G., & Burns, H. J. (1978). Semantic integration of verbal information into a visual memory. *Journal of Experimental Psychology: Human Learning and Memory* 4(1), 19.

Long, D. L., & Golding, J. M. (1993). Superordinate goal inferences: Are they automatically generated during comprehension? *Discourse Processes* 16(1–2), 55–73.

Long, D. L., Golding, J. M., & Graesser, A. C. (1992). A test of the on-line status of goal-related inferences. *Journal of Memory and Language* 31(5), 634–47.

Long, D. L., Kreuz, R. J., & Church, M. (1989). A functional approach to irony. In J. S. Mio (chair), *Meaning What We Don't Say: Challenges of Nonliteral Communication* (symposium conducted at the annual meeting of the Western Psychological Association, Reno, NV).

Lorre, C., Prady, B., Engel, S., Rosenstock, R., Goetsch, D., Molaro, S. (writers), & Cendrowski, M. (director). (2008). The white asparagus triangulation [television series episode]. In P. Chakos & F. O. Balyeu (producers), *The Big Bang Theory*. Los Angeles, CA: Chuck Lorre Productions & Warner Bros. Television.

Loue, S. (2008). *The Transformative Power of Metaphor in Therapy*. New York: Springer.

Lovie, P. (1985). A note on an unexpected anchoring bias in intuitive statistical inference. *Cognition* 21(1), 69–72.

Lucas, G. (producer), & Lucas, G. (director). (1977). *Star Wars*. Episode IV: *A New Hope* [motion picture]. Los Angeles, CA: 20th Century Fox.

Lunsford, R. F. (2014). Manipulative arguments in political speech. Paper presented at the 6th Symposium on Intercultural, Cognitive and Social Pragmatics Conference, Seville, Spain.

Lusch, V. R., & Colston, H. L. (2000). A gender difference in asyndeton. Poster session presented at the meeting of the American Psychological Society, Miami, FL.

Luu, P., Tucker, D. M., Derryberry, D., Reed, M., & Poulsen, C. (2003). Electrophysiological responses to errors and feedback in the process of action regulation. *Psychological Science* 14(1), 47–53.

MacDonald III, A. W., Cohen, J. D., Stenger, V. A., & Carter, Cameron S. (2000). Dissociating the role of the dorsolateral prefrontal and anterior cingulate cortex in cognitive control. *Science* 288(5472), 1835–8.

Maddux, W. W., Adam, H., & Galinsky, A. D. (2010). When in Rome … learn why the Romans do what they do: How multicultural learning experiences facilitate creativity. *Personality and Social Psychology Bulletin* 36(6), 731–41.

Magee, J. C., Milliken, F. J., & Lurie, A. R. (2010). Power differences in the construal of a crisis: The immediate aftermath of September 11, 2001. *Personality and Social Psychology Bulletin* 36(3), 354–70.

Maglio, S. J., & Trope, Y. (2012). Disembodiment: Abstract construal attenuates the influence of contextual bodily state in judgment. *Journal of Experimental Psychology: General* 141(2), 211–16.

Malgady, R. G., & Johnson, M. (1980). Measurement of figurative language: Semantic feature models of comprehension and appreciation. In R. P. Honeck & R. Hoffman (eds.), *Cognition and Figurative Language* (pp. 17–40). Hillsdale, NJ: Erlbaum.

Malt, B. C., & Eiter, B. (2004). Even with a green card, you can be put out to pasture and still have to work: Non-native intuitions of the transparency of common English idioms. *Memory & Cognition* 32(6), 896–904.

Markel, N. N., & Hamp, E. P. (1960). Connotative meanings of certain phoneme sequences. *Studies in Linguistics* 15(1), 47–61.

Mason, Z. J. (2004). CorMet: A computational, corpus-based conventional metaphor extraction system. *Computational Linguistics* 30(1), 23–44.

Mateo, J., & Yus, F. (2013). Towards a cross-cultural pragmatic taxonomy of insults. *Journal of Language Aggression and Conflict* 1(1), 87–114.

McGlone, M. S. (2011). Hyperbole, homunculi, and hindsight bias: An alternative evaluation of conceptual metaphor theory. *Discourse Processes* 48(8), 563–74.

McKoon, G., & Ratcliff, R. (1990). Textual inferences: Models and measures. In D. A. Balota, G. B. Flores D'Arcais, & K. Rayner (eds.), *Comprehension Processes in Reading* (pp. 403–22). Hillsdale, NJ: Erlbaum.

(1992). Inference during reading. *Psychological Review* 99(3), 440.

Meibauer, J. (2008). Tautology as presumptive meaning. *Pragmatics & Cognition* 16(3), 439–70.

Mieder, W. (2008). *"Proverbs Speak Louder than Words": Folk Wisdom in Art, Culture, Folklore, History, Literature, and Mass Media*. New York: Lang.

Miltner, W. H. R., Braun, C. H., & Coles, M. G. H. (1997). Event-related brain potentials following incorrect feedback in a time-estimation task: Evidence for a "generic" neural system for error detection. *Journal of Cognitive Neuroscience* 9(6), 788–98.

Mitchell, J. P. (2008). Contributions of functional neuroimaging to the study of social cognition. *Current Directions in Psychological Science* 17(2), 142–6.

Mitchell, J. P., Macrae, C. N., & Banaji, M. R. (2006). Dissociable medial prefrontal contributions to judgments of similar and dissimilar others. *Neuron* 50(4), 655–63.

Muscatell, K. A., Morelli, S. A., Falk, E. B., Way, B. M., Pfeifer, J. H., Galinsky, A. D., Eisenberger, N. I., et al. (2012). Social status modulates neural activity in the mentalizing network. *NeuroImage* 60(3), 1771–7.

Nerlich, B., & Clarke, D. D. (2001). Ambiguities we live by: Towards a pragmatics of polysemy. *Journal of Pragmatics* 33(1), 1–20.

Newman, L. S., & Uleman, J. S. (1990). Assimilation and contrast effects in spontaneous trait inference. *Personality and Social Psychology Bulletin* 16(2), 224–40.

Nicholson, A., Whalen, J. M., & Pexman, P. M. (2013). Children's processing of emotion in ironic language. *Frontiers in Psychology* 4. Available at: http://www.frontiersin.org/Journal/10.3389/fpsyg.2013.00691/full.

Norrick, N. R. (2001). On the conversational performance of narrative jokes: Toward an account of timing. *Humor* 14(3), 255–74.

Noveck, I. A., (2001). When children are more logical than adults: Experimental investigations of scalar implicature. *Cognition*, 78(2), 165–188.

Noveck, I. A., & Posada, A. (2003). Characterizing the time course of an implicature: An evoked potentials study. *Brain and Language* 85(2), 203–10.

O'Brien, E. J., Shank, D. M., Myers, J. L., & Rayner, K. (1988). Elaborative inferences during reading: Do they occur on-line? *Journal of Experimental Psychology: Learning, Memory, and Cognition* 14(3), 410.

Oakley, T., & Coulson, S. (2008). Connecting the dots: Mental spaces and metaphoric language in discourse. In T. Oakley & A. Hougaard (eds.), *Mental Spaces in Discourse and Interaction* (pp. 27–50). Amsterdam: Benjamins.

Obama rejects "lipstick" charge. (2008). *BBC News Online*, September 10. Available at: http://news.bbc.co.uk/2/hi/americas/7608653.stm.

Okamoto, S. (2002). Politeness and the perception of irony: Honorifics in Japanese. *Metaphor and Symbol* 17(2), 119–39.

Ortony, A. (1975). Why metaphors are not just nice. *Educational Theory* 25(1), 45–53.

Ortony, A., Vondruska, R. J., Foss, M. A., & Jones, L. E. (1985). Salience, similes, and the asymmetry of similarity. *Journal of Memory and Language* 24(5), 569–94.

Papafragou, A., & Musolino, J. (2003). Scalar implicatures: Experiments at the semantics-pragmatics interface. *Cognition* 86(3), 253–82.

Parault, S. J., & Schwanenflugel, P. J. (2006). Sound-symbolism: A piece in the puzzle of word learning. *Journal of Psycholinguistic Research* 35(4), 329–51.

Partington, A., Duguid, A., & Taylor, C. (2013). *Patterns and Meanings in Discourse: Theory and Practice in Corpus-Assisted Discourse Studies (CADS)*. Amsterdam: Benjamins.

Pennebaker, J. W. (1993). Putting stress into words: Health, linguistic, and therapeutic implications. *Behaviour Research and Therapy* 31(6), 539–48.

(1997). Writing about emotional experiences as a therapeutic process. *Psychological Science* 8(3), 162–6.

(2000). Telling stories: The health benefits of narrative. *Literature and Medicine* 19(1), 3–18.

Perfetti, C. A. (1989). There are generalized abilities and one of them is reading. In Resnick, Lauren B. (ed). *Knowing, learning, and instruction: Essays in honor of Robert Glaser* (pp. 307–335). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc, England.

Perfetti, C. A. (1993). Why inferences might be restricted. *Discourse Processes* 16(1–2), 181–92.

Perfetti, C. A., & Resnick, L. B. (1989). There are generalized abilities and one of them is reading. In L. B. Resnick (ed.), *Knowing, Learning, and Instruction: Essays in Honor of Robert Glaser* (pp. 307–36). Hillsdale, NJ: Erlbaum.

Perfetti, C. A., & Roth, S. (1981). Some of the interactive processes in reading. In A. M. Lesgold & C. A. Perfetti (eds.), *Interactive Processes in Reading*. Hillsdale, NJ: Erlbaum.

Petty, R. E., & Cacioppo, J. T. (1986). *Communication and Persuasion: Central and Peripheral Routes to Attitude Change*. New York: Springer.

Petty, R. E., Cacioppo, J. T., & Heesacker, M. (1981). Effects of rhetorical questions on persuasion: A cognitive response analysis. *Journal of Personality and Social Psychology* 40(3), 432.

Pexman, P. M. (2005). Social factors in the interpretation of verbal irony: The roles of speaker and listener characteristics. In H. L. Colston & A. N. Katz (eds.), *Figurative Language Comprehension: Social and Cultural Influences* (pp. 209–32). Hillsdale, NJ: Erlbaum.

(2008). It's fascinating research: The cognition of verbal irony. *Current Directions in Psychological Science* 17(4), 286–90.

Pexman, P. M., Ferretti, T. R., & Katz, A. N. (2000). Discourse factors that influence online reading of metaphor and irony. *Discourse Processes* 29(3), 201–22.

(2007). Reading of metaphor and irony. In R. W. Gibbs & H. L. Colston (eds.), *Irony in Language and Thought: A Cognitive Science Reader* (pp. 231–51). Hillsdale, NJ: Erlbaum.

Pexman, P. M., & Olineck, K. M. (2002). Understanding irony: How do stereotypes cue speaker intent? *Journal of Language and Social Psychology* 21(3), 245–74.

Pexman, P. M., Zdrazilova, L., McConnachie, D., Deater-Deckard, K., & Petrill, S. A. (2009). "That was smooth, Mom": Children's production of verbal and gestural irony. *Metaphor and Symbol* 24(4), 237–48.

Pexman, P. M., & Zvaigzne, M. T. (2004). Does irony go better with friends? *Metaphor and Symbol* 19(2), 143–63.

Pfaff, K. L., Gibbs, R. W., & Johnson, M. D. (1997). Metaphor in using and understanding euphemism and dysphemism. *Applied Psycholinguistics* 18(01), 59–83.

Pinker, S. (2008). The stupidity of dignity. *New Republic* 28, 28–31.

Poggi, I., D'Errico, F., & Vincze, L. (2011). Agreement and its multimodal communication in debates: A qualitative analysis. *Cognitive Computation* 3(3), 466–79.

(2015). Direct and indirect verbal and bodily insults and other forms of aggressive communication. In F. D'Errico, I. Poggi, A. Vinciarelli, & L. Vincze (eds.), *Conflict and Multimodal Communication: Social Research and Machine Intelligence* (pp. 243–64). Charn, Switzerland: Springer.

Pomerantz, A. (1986). Extreme case formulations: A way of legitimizing claims. *Human Studies* 9(2–3), 219–29.

Pragglejaz Group. (2007). MIP: A method for identifying metaphorically used words in discourse. *Metaphor and Symbol* 22(1), 1–39.

Recanati, F. (2004). *Literal Meaning*. Cambridge University Press.

(2007). *Perspectival Thought: A Plea for (Moderate) Relativism*. Oxford University Press.

Recchia, H. E., Howe, N., Ross, H. S., & Alexander, S. (2010). Children's understanding and production of verbal irony in family conversations. *British Journal of Developmental Psychology* 28(2), 255–74.

Richards, N. (2001). An idiomatic argument for lexical decomposition. *Linguistic Inquiry* 32(1), 183–92.

Richter, L., & Kruglanski, A. W. (1999). Motivated search for common ground: Need for closure effects on audience design in interpersonal communication. *Personality and Social Psychology Bulletin* 25(9), 1101–14.

Ridderinkhof, K. R., Ullsperger, M., Crone, E. A., & Nieuwenhuis, S. (2004). The role of the medial frontal cortex in cognitive control. *Science* 306(5695), 443–47.

Riloff, E. (2014, August). Sarcasm as contrast between a positive sentiment and negative situation. Paper presented at the meeting of the Cognitive Science Society, Quebec, Canada.

Riloff, E., Qadir, A., Surve, P., De Silva, L., Gilbert, N., & Huang, R. (2013). Sarcasm as contrast between a positive sentiment and negative situation. In *Proceedings of the 2013 Conference on Empirical Methods in Natural Language Processing* (pp. 704–14). Seattle, WA: Association for Computational Linguistics. Available at: http://www.cs.utah.edu/~alnds/papers/sarcasm_2013.pdf.

Ritchie, L. D. (2004a). Common ground in metaphor theory: Continuing the conversation. *Metaphor and Symbol* 19(3), 233–44.

(2004b). Lost in "conceptual space": Metaphors of conceptual integration. *Metaphor and Symbol* 19(1), 31–50.

(2004c). Metaphors in conversational context: Toward a connectivity theory of metaphor interpretation. *Metaphor and Symbol* 19(4), 265–87.

(2005). Frame-shifting in humor and irony. *Metaphor and Symbol* 20(4), 275–94.

(2008). X is a journey: Embodied simulation in metaphor interpretation. *Metaphor and Symbol* 23(3), 174–99.

Roberts, R. M., & Kreuz, R. J. (1994). Why do people use figurative language? *Psychological Science* 5(3), 159–63.

Rockwell, P. (2000). Lower, slower, louder: Vocal cues of sarcasm. *Journal of Psycholinguistic Research* 29(5), 483–95.

(2007). Vocal features of conversational sarcasm: A comparison of methods. *Journal of Psycholinguistic Research* 36(5), 361–9.

Rosaldo, M. Z. (1982). Things we do with words: Ilongot speech acts and speech act theory in philosophy. *Language in Society* 11(2), 203–37.

Russo, R. (1997). *Straight Man*. New York: Random House.

Ryder, N. & Leinonen, E. (2011). Relevance theory and language interpretation. In J. Guendouzi, F. Loncke, M.J. Williams, (eds.), *The handbook of psycholinguistic and cognitive processes: Perspectives in communication disorders* (pp. 747–760). New York, NY: Psychology Press, US.

Ryder, N., & Leinonen, E. (2014). Pragmatic language development in language impaired and typically developing children: Incorrect answers in context. *Journal of Psycholinguistic Research* 43(1), 45–58.

Sanders, R. E., Wu, Y., & Bonito, J. A. (2013). The calculability of communicative intentions through pragmatic reasoning. *Pragmatics & Cognition* 21(1), 1–34.

Sardinha, T. B. (2006). Collocation lists as instruments for metaphor detection in corpora. *DELTA: Documentação de Estudos Em Lingüística Teórica E Aplicada* 22(2), 249–74.

(2012). An assessment of metaphor retrieval methods. In F. MacArthur, J. L. Oncins-Martinez, M. Sanchez-Garcia, & A. M. Piquer-Piriz (eds.), *Metaphor in Use: Context, Culture, and Communication* (pp. 21–50), Amsterdam, Benjamins.

Schank, R. C. (1986). *Explanation Patterns: Understanding Mechanically and Creatively*. Hillsdale, NJ: Erlbaum.

Scharrer, L., & Christmann, U. (2011). Voice modulations in German ironic speech. *Language and Speech* 54(4), 435–65.
Schmidt, R. A., & Bjork, R. A. (1992). New conceptualizations of practice: Common principles in three paradigms suggest new concepts for training. *Psychological Science* 3(4), 207–17.
Schmitt, R. (2005). Systematic metaphor analysis as a method of qualitative research. *Qualitative Report* 10(2), 358–94.
Schnall, S., Haidt, J., Clore, G. L., & Jordan, A. H. (2008). Disgust as embodied moral judgment. *Personality and Social Psychology Bulletin* 34(8), 1096–109.
Schober, M. F., & Clark, H. H. (1989). Understanding by addressees and overhearers. *Cognitive Psychology* 21(2), 211–32.
Schourup, L. (2011). The discourse marker now: A relevance-theoretic approach. *Journal of Pragmatics* 43(8), 2110–29.
Searle, J. R. (1969). *Speech Acts: An Essay in the Philosophy of Language*. Cambridge University Press.
(1975). Indirect speech acts. In P. Cole & J. L. Morgan (eds.), *Syntax and Semantics*, Vol. 3 (pp. 59–82). Cambridge University Press.
(1979). *Expression and Meaning: Studies in the Theory of Speech Acts*. New York: Cambridge University Press.
Seguin, M. (2007). A typically sarcastic tone of voice? Yeah, right! *Cahiers Linguistiques d'Ottawa* 35, 161.
Seidlhofer, B. (2009). Common ground and different realities: World Englishes and English as a lingua franca. *World Englishes* 28(2), 236–45.
Semino, E., Heywood, J., & Short, M. (2004). Methodological problems in the analysis of metaphors in a corpus of conversations about cancer. *Journal of Pragmatics* 36(7), 1271–94.
Sequeiros, X. R. (2011). On metaphor, relevance, and pragmatic interpretation in Spanish. *Modern Language Review* 106(4), 1028–53.
Shteynberg, G. (2010). A silent emergence of culture: The social tuning effect. *Journal of Personality and Social Psychology* 99(4), 683–9.
Singer, M., & Remillard, G. (2004). Retrieving text inferences: Controlled and automatic influences. *Memory & Cognition* 32(8), 1223–37.
Slugoski, B. R., & Turnbull, W. (1988). Cruel to be kind and kind to be cruel: Sarcasm, banter and social relations. *Journal of Language and Social Psychology* 7(2), 101–21.
Smith, P. K., & Trope, Y. (2006). You focus on the forest when you're in charge of the trees: Power priming and abstract information processing. *Journal of Personality and Social Psychology* 90(4), 578–96.
Sperber, D. (1984). Verbal irony: Pretense or echoic mention? *Journal of Experimental Psychology: General* 113(1), 130–6.
(1994). The modularity of thought and the epidemiology of representations. In L. A. Hirschfeld & S. A. Gelman (eds.), *Mapping the Mind: Domain Specificity in Cognition and Culture* (pp. 39–67). Cambridge University Press.
(1996). *Explaining Culture: A Naturalistic Approach*. Oxford, UK: Blackwell.
Sperber, D., & Wilson, D. (1981). Irony and the use-mention distinction. In P. Cole (ed.), *Radical Pragmatics* (pp. 295–318). New York: Academic Press.
(1986). *Relevance: Communication and Cognition*. Oxford, UK: Blackwell.

(1995). *Relevance: Communication and Cognition*, 2nd ed. Oxford, UK: Blackwell.
Spotorno, N., & Noveck, I. A. (2014). When is irony effortful? *Journal of Experimental Psychology: General* 143(4), 1649–65.
Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology* 69(5), 797–811.
Steen, G. J. (2002). Towards a procedure for metaphor identification. *Language and Literature* 11(1), 17–33.
(2011). The contemporary theory of metaphor: Now new and improved! *Review of Cognitive Linguistics* 9(1), 26–64.
Steen, G. J., Dorst, A. G., Herrmann, J. B., Kaal, A. A., Krennmayr, T., & Pasma, T. (2010). *Converging Evidence in Language and Communication Research*. Vol. 14: *A Method for Linguistic Metaphor Identification: From MIP to MIPVU*. Amsterdam: Benjamins.
Stover, H. (2011). Awareness in metaphor understanding: "The lingering of the literal." *Review of Cognitive Linguistics* 9(1), 65–82.
Swartzwelder, J. (writer), & Anderson, B. (director). (1997). Homer vs. the 18th Amendment [television series episode]. In J. L. Brooks (producer), *The Simpsons*. Los Angeles, CA: Gracie Films.
Tannen, D. (1984). *Conversational Style: Analyzing Talk among Friends*. Norwood, NJ: Ablex.
(2005). *Conversational Style: Analyzing Talk among Friends*. New York: Oxford University Press.
Tendahl, M., & Gibbs, R. W. (2008). Complementary perspectives on metaphor: Cognitive linguistics and relevance theory. *Journal of Pragmatics* 40(11), 1823–64.
The Huffington Post Canada. (2014). *"Set Yourself Free": PSA Goes in a Completely Unexpected Direction* [video file]. Available at: http://www.huffingtonpost.ca/2014/01/30/set-yourself-free-psa_n_4699191.html?ir=Canada+Living&ref=topbar.
Todd, A. R., Bodenhausen, G. V., & Galinsky, A. D. (2012). Perspective taking combats the denial of intergroup discrimination. *Journal of Experimental Social Psychology* 48(3), 738–45.
Todd, A. R., Hanko, K., Galinsky, A. D., & Mussweiler, T. (2011). When focusing on differences leads to similar perspectives. *Psychological Science* 22(1), 134–41.
Trabasso, T., & Sperry, L. L. (1985). Causal relatedness and importance of story events. *Journal of Memory and Language* 24(5), 595–611.
Trabasso, T., & Suh, S. (1993). Understanding text: Achieving explanatory coherence through on-line inferences and mental operations in working memory. *Discourse Processes* 16(1–2), 3–34.
Trabasso, T., & van den Broek, P. (1985). Causal thinking and the representation of narrative events. *Journal of Memory and Language* 24(5), 612–30.
Trabasso, T., van den Broek, P., & Suh, S. Y. (1989). Logical necessity and transitivity of causal relations in stories. *Discourse Processes* 12(1), 1–25.
Trope, Y., & Liberman, N. (2010). Construal-level theory of psychological distance. *Psychological Review* 117(2), 440–63.

Utsumi, A. (2000). Verbal irony as implicity display of ironic environment: Distinguishing ironic utterances from nonirony. *Journal of Pragmatics* 32(12), 1777–806.

(2007). Interpretive diversity explains metaphor-simile distinction. *Metaphor and Symbol* 22(4), 291–312.

Uttich, K., & Lombrozo, T. (2010). Norms inform mental state ascriptions: A rational explanation for the side-effect effect. *Cognition* 116(1), 87–100.

Valencia-Laver, D. L., & Light, L. L. (2000). The occurrence of causal bridging and predictive inferences in young and older adults. *Discourse Processes* 30(1), 27–56.

Van de Voort, M. E. C., & Vonk, W. (2014). You don't die immediately when you kick an empty bucket: A processing view on semantic and syntactic characteristics of idioms. In M. Everaert, E. J. van der Linden, A. Schenk, & R. Schreuder (eds.), *Idioms: Structural and Psychological Perspectives* (pp. 283–99). New York: Psychology Press.

Van den Broek, P. (1988). The effects of causal relations and hierarchical position on the importance of story statements. *Journal of Memory and Language* 27(1), 1–22.

(1990). The causal inference maker: Towards a process model of inference generation in text comprehension. In D. A. Balota, G. B. Flores D'Arcais, & K. Rayner (eds.), *Comprehension Processes in Reading*. Hillsdale, NJ: Erlbaum.

Van den Broek, P., Rapp, D. N., & Kendeou, P. (2005). Integrating memory-based and constructionist processes in accounts of reading comprehension. *Discourse Processes* 39(2–3), 299–316.

Veale, T., Feyaerts, K., & Brône, G. (2006). The cognitive mechanisms of adversarial humor. *HUMOR: International Journal of Humor Research* 19(3). Available at: http://www.degruyter.com/view/j/humr.2006.19.issue-3/humor.2006.016/humor.2006.016.xml.

Vitti, J. (writer), & Marcantel, M. (director). (2002). Weekend at Burnsie's [television series episode]. In J. L. Brooks (producer), *The Simpsons*. Los Angeles, CA: Gracie Films.

Vlastos, G. (1991). *Socrates, Ironist and Moral Philosopher*. New York: Cambridge University Press.

Wałaszewska, E. (2011). Broadening and narrowing in lexical development: How relevance theory can account for children's overextensions and underextensions. *Journal of Pragmatics* 43(1), 314–26.

(2014). The offensiveness of animal metaphors: A relevance-theoretic view. Paper presented at the 6th Symposium on Intercultural, Cognitive and Social Pragmatics. Seville, Spain.

Ward, G. L., & Hirschberg, J. (1991). A pragmatic analysis of tautological utternances. *Journal of Pragmatics* 15(6), 507–20.

Wheatley, T., & Haidt, J. (2005). Hypnotic disgust makes moral judgments more severe. *Psychological Science* 16(10), 780–4.

White, H. D. (2011). Relevance theory and citations. *Journal of Pragmatics* 43(14), 3345–61.

Williams, K. D. (2001). *Ostracism: The Power of Silence*. New York: Guildford Press.

Williams, L. E., & Bargh, J. A. (2008). Experiencing physical warmth promotes interpersonal warmth. *Science* 322(5901), 606–7.
Wilson, D. (2011). Parallels and differences in the treatment of metaphor in relevance theory and cognitive linguistics. *Studia Linguistica Universitatis Iagellonicae Cracoviensis* 128, 195–213.
Wilson, D., & Sperber, D. (1992). On verbal irony. *Lingua* 87(1), 53–76.
(2012). *Meaning and Relevance*. Cambridge University Press.
Wilson, N. L., & Gibbs, R. W. (2007). Real and imagined body movement primes metaphor comprehension. *Cognitive Science* 31(4), 721–31.
Wilson, T. D., Houston, C. E., Etling, K. M., & Brekke, N. (1996). A new look at anchoring effects: Basic anchoring and its antecedents. *Journal of Experimental Psychology: General* 125(4), 387.
Winner, E. (1988). *The Point of Words: Children's Understanding of Metaphor and Irony*. Cambridge, MA: Harvard University Press.
Winner, E., & Gardner, H. (1993). Metaphor and irony: Two levels of understanding. In A. Ortony (ed.), *Metaphor and Thought* (pp. 425–43). Cambridge University Press.
Withy, E. (2013). Of selfies, shelfies and other cray-cray language. *Edmonton Journal*, December 17.
Wolff, P., & Gentner, D. (2011). Structure-mapping in metaphor comprehension. *Cognitive Science* 35(8), 1456–88.
Woodland, J., & Voyer, D. (2011). Context and intonation in the perception of sarcasm. *Metaphor and Symbol* 26(3), 227–39.
Wu, S., & Keysar, B. (2007). The effect of information overlap on communication effectiveness. *Cognitive Science* 31(1), 169–81.
Xu, X., Zuo, X., Wang, X., & Han, S. (2009). Do you feel my pain? Racial group membership modulates empathic neural responses. *Journal of Neuroscience* 29(26), 8525–9.
Yang, Y. (2013). A corpus-based study of interpersonal grammatical metaphor in spoken Chinese. *Language Sciences* 38, 1–21.
Yao, J., Song, J., & Singh, M. (2013). The ironical Chinese *bei* construction and its accessibility to English speakers. *Journal of Pragmatics* 55, 195–209.
Yu, R., & Zhou, X. (2006). Brain responses to outcomes of one's own and other's performance in a gambling task. *Neuroreport* 17(16), 1747–51.
Zhong, C.-B., & Liljenquist, K. A. (2006). Washing away your sins: Threatened morality and physical cleansing. *Science* 313(5792), 1451–2.
Zimmer, B. (2008). Who first put "lipstick on a pig"? *Slate Magazine*, September 10. Available at: http://www.slate.com/articles/news_and_politics/explainer/2008/09/who_first_put_lipstick_on_a_pig.html.
Zuckerman, M., Porac, J., Lathin, D., & Deci, E. L. (1978). On the importance of self-determination for intrinsically-motivated behavior. *Personality and Social Psychology Bulletin* 4(3), 443–6.
Zwaan, R. A., & Singer, M. (2003). Text comprehension. In A. C. Graesser, M. A. Gernsbacher, & S. R. Goldman (eds.), *Handbook of Discourse Processes*. Hillsdale, NJ: Erlbaum.

INDEX