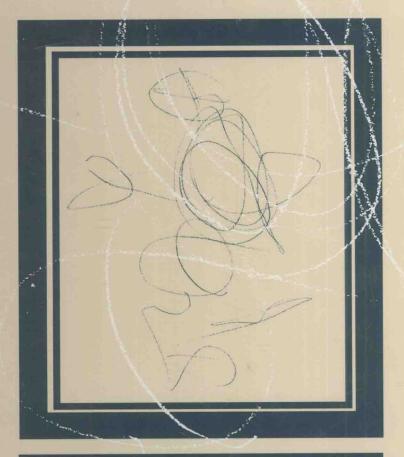
# IRONY IN LANGUAGE AND THOUGHT



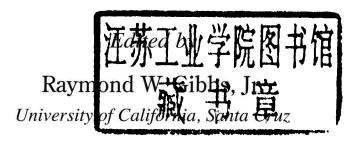
A Cognitive Science Reader

EDITED BY

RAYMOND W. GIBBS, JR. • HERBERT L. COLSTON

# IRONY IN LANGUAGE AND THOUGHT

A Cognitive Science Reader



and

Herbert L. Colston

University of Wisconsin, Parkside



Cover design by Katherine Houghtaling Lacey.

Cover artwork by Morgan Gibbs Colston. Father Figure, 2002; paraffin crayon on paper,  $46 \times 30$  cm, private collection.

Lawrence Erlbaum Associates Taylor & Francis Group 270 Madison Avenue New York, NY 10016 Lawrence Erlbaum Associates Taylor & Francis Group 2 Park Square Milton Park, Abingdon Oxon OX14 4RN

© 2007 by Taylor & Francis Group, LLC Lawrence Erlbaum Associates is an imprint of Taylor & Francis Group, an Informa business

Printed in the United States of America on acid-free paper  $10\,9\,8\,7\,6\,5\,4\,3\,2\,1$ 

International Standard Book Number-13: 978-0-8058-6062-7 (Softcover) 978-0-8058-6061-0 (Hardcover)

No part of this book may be reprinted, reproduced, transmitted, or utilized in any form by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying, microfilming, and recording, or in any information storage or retrieval system, without written permission from the publishers.

**Trademark Notice:** Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

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

Irony in language and thought : a cognitive science reader / edited by Herbert L. Colston and Raymond W. Gibbs, Jr.

p. cm.

Includes bibliographical references and index.

ISBN 978-0-8058-6062-7 (pbk.: alk. paper) -- ISBN 978-0-8058-6061-0 (alk. paper)

-- ISBN 978-1-4106-1668-5 (e-book)

1. Irony. I. Colston, Herbert L. II. Gibbs, Raymond W. III. Title.

P301.5.I73I76 2007 809'.918--dc22

2006037734

Visit the Taylor & Francis Web site at http://www.taylorandfrancis.com

and the LEA Web site at http://www.erlbaum.com

## **Preface**

Irony is a device of both mind and language for acknowledging the gap between what is expected and what is observed. As one of the great tropes, or figures of speech, irony has been discussed and debated for thousands of years by all those interested in rhetoric. In recent decades it has been studied as a special mode of thought, perhaps used by all individuals, and thus one of many conceptual devices in the poetics of mind. Although classical studies focused on different forms of irony (e.g., tragic, Socratic, irony of fate), late 20th-century scholars, especially philosophers and linguists, have explored the ways that ironic speech conveys pragmatic meaning. One major theory is that irony is understood as a secondary meaning after the primary semantic meaning has been analyzed and rejected in the present context. Starting in the mid 1980s, experimental psycholinguists and linguists began exploring the implications of this traditional pragmatic view for psychological theories of how people understand figurative language, with irony being a special case where a speaker contextually implies, at least seemingly, the opposite of what was literally said. Over the past 25 years, dozens of experiments and many discourse studies have emerged that generally suggest a far more complicated view of irony, how it is understood, the way it is acquired, its social functions, and the ways that ironic language reflects individuals' ironic conceptualizations of their own experiences and the world around them. Unlike previous explorations of irony, in both language and thought, this recent work has a strong empirical foundation where scholars aim to compare and contrast different forms of irony use against other figurative and non-figurative modes of thinking and speaking.

The purpose of "Irony in language and thought: A cognitive science reader" is to offer students of irony an overview of the major works within cognitive science on the nature, function, and understanding of irony. This volume fills a significant gap in the literature on figurative language and thought. Although there are dozens of books on metaphor alone, very few books have been devoted exclusively to irony in its different forms, despite the increasing popularity of studies of irony and individual theories of irony use and understanding. We have collected those articles that are among the most widely cited in the interdisciplinary study of irony within disciplines encompassing the cognitive sciences, and have included several others that

x PREFACE

are likely to have impact on the conduct of research in the near future. These articles are roughly divided into five different sections: theories of irony, context in irony comprehension, the social functions of irony, development of irony understanding, and situational irony. We offer a more extensive overview of these works and situate them within the historical context of irony research in an introductory chapter. Our thoughts on the future of irony studies are provided in a concluding section. "Irony in language and thought: A cognitive science reader" surely best represents the important past on irony research. Yet we offer this collection in the hope that a comprehensive look at the complexity of irony in thought and language will generate new theories and empirical research, and give irony its proper recognition within cognitive science as a fundamental property of mind.

We thank the authors of these papers for their fine work and their agreement to republish the articles. We also thank Cathleen Petree of Lawrence Erlbaum Associates for all her assistance in making this project a reality.

# Contents

|     | Preface  | ix  |  |  |  |
|-----|--|-----|--|--|--|
| PA  | RT I. INTRODUCTION   |     |  |  |  |
| 1   | A Brief History of Irony<br>Herbert L. Colston & Raymond W. Gibbs, Jr.   | 3   |  |  |  |
| PAI | RT II. THEORIES OF IRONY   |     |  |  |  |
| 2   | On the Pretense Theory of Irony Herbert H. Clark & Richard J. Gerrig   | 25  |  |  |  |
| 3   | On Verbal Irony<br>Deirdre Wilson & Dan Sperber  |     |  |  |  |
| 4   | How About Another Piece of Pie: The Allusional Pretense Theory of Discourse Irony Sachi Kumon-Nakamura, Sam Glucksberg, & Mary Brown |     |  |  |  |
| 5   | On Necessary Conditions for Verbal Irony Comprehension<br>Herbert L. Colston   |     |  |  |  |
| 6   | Irony As Relevant Inappropriateness Salvatore Attardo  |     |  |  |  |
| PAR | T III. CONTEXT IN IRONY COMPREHENSION  |     |  |  |  |
| 7   | On the Psycholinguistics of Sarcasm Raymond W. Gibbs, Jr.  | 173 |  |  |  |

| vi | CONTENTS |
|----|----------|
|    |          |

| 8   | Irony: Context and Salience Rachel Giora & Ofer Fein  |     |  |  |
|-----|---|-----|--|--|
| 9   | Neuropsychological Studies of Sarcasm<br>Skye McDonald  |     |  |  |
| 10  | Discourse Factors That Influence Online Reading of Metaphor and Irony Penny M. Pexman, Todd R. Ferretti, & Albert N. Katz                           | 231 |  |  |
| П   | Obligatory Processing of Literal Meaning of Ironic Utterances:<br>Further Evidence<br>John Schwoebel, Shelly Dews, Ellen Winner, & Kavitha Srinivas | 253 |  |  |
| 12  | Irony: Negation, Echo, and Metarepresentation<br>Carmen Curco   | 269 |  |  |
| PAR | T IV: THE SOCIAL FUNCTIONS OF IRONY   |     |  |  |
| 13  | Why Not Say It Directly? The Social Functions of Irony Shelly Dews, Joan Kaplan, & Ellen Winner   | 297 |  |  |
| 14  | Salting a Wound or Sugaring a Pill: The Pragmatic Functions of Ironic Criticism  Herbert L. Colston   | 319 |  |  |
| 15  | Irony in Talk Among Friends Raymond W. Gibbs, Jr.   | 339 |  |  |
| 16  | From "Blame by Praise" to "Praise by Blame:" Analysis of Vocal Patterns in Ironic Communication  Luigi Anolli, Rita Ciceri, & Maria G. Infantino    | 361 |  |  |
| 17  | Responding to Irony in Different Contexts: On Cognition in Conversation  Helga Kotthoff   | 381 |  |  |

CONTENTS vii

| PAR | T V: DEVELOPMENT OF IRONY UNDERSTANDING  |     |  |  |
|-----|--|-----|--|--|
| 18  | A Developmental Test of Theoretical Perspectives on the Understanding of Verbal Irony: Children's Recognition of Allusion and Pragmatic Insincerity  Marlena A. Creusere | 409 |  |  |
| 19  | Children's Comprehension of Critical and Complimentary Forms of Verbal Irony  Jeffrey T. Hancock, Philip J. Dunham, & Kelly Purdy  | 425 |  |  |
| 20  | Children's Perceptions of the Social Functions of Verbal Irony Melanie Harris Glenwright & Penny M. Pexman   |     |  |  |
|     | T VI: SITUATIONAL IRONY: A CONCEPT OF EVENTS<br>NE AWRY  |     |  |  |
| 21  | Situational Irony: A Concept of Events Gone Awry<br>Joan Lucariello  | 467 |  |  |
| 22  | Verbal Irony As Implicit Display of Ironic Environment:<br>Distinguishing Ironic Utterances From Nonirony<br>Akira Utsumi  | 499 |  |  |
| 23  | The Bicoherence Theory of Situational Irony Cameron Shelley  | 531 |  |  |
| PAR | T VII: CONCLUSION  |     |  |  |
| 24  | The Future of Irony Studies Raymond W. Gibbs, Jr. & Herbert L. Colston   | 581 |  |  |
|     | Author Index   | 595 |  |  |
|     | Subject Index  | 605 |  |  |

# PART I

# INTRODUCTION

### CHAPTER 1

# A Brief History of Irony

Herbert L. Colston University of Wisconsin–Parkside

Raymond W. Gibbs, Jr. University of California, Santa Cruz

The scholarly investigation of irony has a very old history and a very broad base. Thinking and commentary about irony in all its forms goes back to some of the earliest recorded philosophical works. The historical and contemporary studies of irony can also be found in fields as diverse as anthropology, literature studies, linguistics, cognitive-, social-, language-, and even clinical-psychology, philosophy, cultural studies and more. And the topics related to irony are as widely arrayed as art, literature, dance, music, media, language, speech, image, thought, cartoons, journalism, theater, politics, situations and many others.

To offer a usable compilation of this incredible history and diversity of irony is an impossible task. We thus chose to limit our scope to the modern study of irony as predominantly related to thought and language. But even such a narrowing of the topic does not make full coverage possible. A great number of scholars, scientists and researchers of many types have published important works in the modern study of irony. We simply could not have included even a small fraction of this work and still obtain a volume not requiring a wheelbarrow. So we instead had to be incredibly selective in our choice of papers.

This volume contains what we have taken to be some of the most influential and important contributions to the modern cognitive scientific study of irony. These works come from a variety of fields and have been published in a wide diversity of international journals in a number of different disciplines. Despite this variety of venues, however, the works have all honed in on what we see as the most central topics to have been addressed. These topics correspond to the main sections of this reader: Theories of Irony—addressing primarily comprehension of its verbal form, Context in Irony Comprehension, Social Functions of Irony, the Development of Irony Understanding, and Situational Irony. We hope putting all these works under one volume will help catalyze future work on irony.

What follows is a very brief attempt at an overview of these central topics in the modern scholarly pursuit of irony. By no means should this be considered an all-inclusive review. Rather, we seek to lend some perspective to the studies we've included, to enable the reader to see how these works have furthered the field.

### THEORIES OF IRONY

One might initially ask why a theory of irony is needed. Whether we are discussing verbal irony—where a speaker says something that seems to be the opposite of what they mean, or situational irony—where some situation in the world is just contradictory, why is a theory required when both of these kinds of irony seem to be relatively straightforward concepts? The answer is that for both verbal and situational irony, one simply cannot explain the phenomena with "straightforward" solutions like take-the-opposite-meaning, or irony-is-simple-contradiction. Most, and arguably all, instances of what is comprehended from an utterance of verbal irony simply does not correspond to the opposite of that utterance, because it is rarely clear, 1) what the opposite of an utterance's literal meaning is, and 2) what in fact even that literal meaning itself is (Brown, 1980; Gibbs & O'Brien, 1991). Additionally, there are a wide variety of instances subsumed under or near the umbrella of situational irony that don't necessarily fit the definition of a contradiction (e.g., coincidences, deviations from predictions, counterfactuals, frame shifts, juxtapositions of bi-coherences, hypocrisy, etc.). Moreover, the mere fact that a host of theories have been presented in an attempt to grapple with verbal and situational irony is itself indicative of the relative intractable nature of these phenomena. It is thus clear that we just cannot get away with seemingly simple solutions that, although possibly resembling what occurs in some prototypical instances of verbal or situational irony, by no means precisely explain those instances nor go anywhere near encompassing all the phenomena considered part of, or related to, the phenomena of irony.

In an attempt to theoretically corral this phenomenon of irony, several theories have been proposed from linguistic, philosophical and psychological backgrounds. Interestingly and arguably, none of these theories has predominated the interdisciplinary group of scholars studying irony, nor has any one been seriously struck down. Rather, they each offer a different perspective on the phenomenon, or use a different theoretical framework in their explication. In reality then, they are all likely explaining a portion of the phenomenon, or one of a variety of mechanisms underlying the comprehension of the phenomenon, without necessarily being incompatible with one another (Colston, 2000). Whether this means that a broader theoretical attempt is required, perhaps one based on an abstract notion such as constraint satisfaction (see Katz, 2005), or whether irony is simply a family of related phenomena that each require their own theoretical approach, remains to be seen. For now, let us just briefly discuss the key theoretical approaches in the current status of the field.

The idea that verbal irony is broader than a simple solution to a linguistic problem is key to several of the theories proposed in the included papers. For instance, Wilson and Sperber (1992) argued that a speaker who uses verbal irony is employing a long-standing philosophical distinction between use and mention. This distinction allows for the difference between using a remark to express one's true position or feeling, versus the mention of, or reference to, a particular position or feeling that one isn't currently expressing. This use/mention distinction opens up the possibility for then making reference to some state of affairs that was predicted, expected or desired, either because of some explicit prediction or based upon a mutually shared domain of knowledge. For instance, if a basketball player uses the ironic utterance, "Nice shot" to condemn a fellow player who misses a game-winning basket, she could be mentioning an explicit prediction by say a bystander, who perhaps said, "This is going to be a nice shot," while the basketball shooter was preparing to throw the ball. Or she could be mentioning the general expectation or desire for good play. This mention or echo of predicted or known events in the midst of unexpected or undesired reality is a key contribution in our thinking about verbal irony.

In a different approach, Clark and Gerrig (1984) proposed that verbal irony is really an instance of role playing that must be recognized as such for correct comprehension. According to Clark and Gerrig, a speaker using verbal irony is "pretending to be an injudicious person speaking to an uninitiated audience; the speaker intends the addressees of the irony to discover the pretense and thereby see his or her attitude toward the speaker, the audience, and the comment" (1984). A speaker of verbal irony is thus acting out what a person other than himself or herself might feel, think, believe and say about some situation, and moreover, is portraying, at least typically, that character in an unbecoming light to essentially distance himself or herself from the position advocated by that character, and likely even to belittle that viewpoint.

One particular advantage of the pretense account is the readiness with which it handles derivation of an ironic speaker's negative (again, typically) attitude (although see Gibbs, 2000, for a treatment of jocular forms of irony, as well as Colston, 2000; Hancock, Dunham, & Purdy, 2000; Schwoebel, Dews, Winner, & Srinivas, 2000; Harris & Pexman, 2003; Anolli, Ciceri, & Infantino, 2000; Dews, Kaplan, & Winner, 1995; Kreuz & Link, 2002, for treatments of ironic praise). By basing the decryption of an ironic utterance on the recognition of the different roles in a speech-actor's portrayal, the personality characteristics given to the portrayed character are brought very much to the forefront of explanation. So a speaker/actor who portrays a character as being an idiot, for instance, with the common acting techniques of voice tone, facial expression, nonverbal cues, etc., is very clearly revealing their negative attitude toward that character and, accordingly, the position the character is advocating. The speaker/actor could just as easily have portrayed the character in a more appealing light and is thus making his or her attitude clear given that he or she has selected it from a number of possibilities.

An approach that in some ways weds the different notions of pretense and echo, but that makes some unique claims of its own is the Allusional Pretense Theory of Discourse Irony (Kumon-Nakamura, Glucksberg, & Brown, 1995). This account

returned to a speech-act analysis of verbal irony comprehension based upon felicity conditions for well formed speech acts. Allusional Pretense claims that utterances of verbal irony must 1) violate the sincerity felicity condition, and 2) occur in the instance of a violation of expectations. Most accounts of verbal irony share the second condition. The first condition, however, enabled explanation of instances where a speaker does not strictly echo, because she neither re-mentions previous predictions or statements nor reminds addressees/hearers of common beliefs or desires. Utterances such as true assertions (e.g., "You sure know a lot," said to a know-it-all), questions (e.g., "How old did you say you were," spoken to someone acting childish), offerings (e.g., "How about another small slice of pizza?" said to a glutton), and over-polite requests (e.g., "Would you mind very much if I asked you to consider cleaning up your room some time this year?" said to a slob) were brought under the explanatory fold by this account.

The two claims of the Allusional Pretense account, and indeed in one form or another the dominant claims found in most of the theories of verbal irony comprehension—1) that verbal irony requires a violation of expectations, and 2) that it requires violation of felicity conditions for well-formed speech acts, was addressed by Colston (2000). This work sought to evaluate these claims with explicit empirical tests. Evidence was found to support the first claim concerning violation of expectations. Indeed, even in instances where no such violation was indicated, comprehenders of verbal irony were shown to have *inferred* such a violation on the part of the speaker. It thus appears that this condition is required for verbal irony comprehension. The second claim concerning felicity conditions for well-formed speech acts, however, was argued to be too narrow. A set of utterances of verbal irony was shown to adhere to these felicity conditions and yet still be interpreted ironically. A broader second condition was recommended that was based upon a violation of Gricean Maxims. A third condition that involved portraying a contrast of current events with expected ones was also proposed.

The Attardo (2001) article is the most recent contribution to the theoretical discussion of irony discussed here. This paper first presents a very thorough review of some of the definitional issues surrounding verbal irony, and then reviews the views of irony both as a figure of speech and as an insincere speech act. The family of "mention" theories of irony comprehension are then criticized for being unable to encompass a wide enough array of irony examples to serve as an encompassing theory of comprehension. Pretense is included in this discussion, but in our opinion is fairly treated as a much broader phenomenon, allowing explanation of dramatic and situational irony. Attardo then moves on to a criticism of psycholinguistic accounts of irony understanding, including Gibbs's (Gibbs, 1986, 1994; Gibbs & O'Brien, 1991) direct access comprehension mechanism and the Relevance theoretic approach, that call for a one-stage model of irony comprehension. The paper then concludes with an exposition of an irony comprehension account based upon relevant inappropriateness.

Most prevalent in Attardo's (2001) criticism of direct access is the argument that a one-stage processing approach "is logically incapable of accounting for novel in-

put, since it will fail to differentiate between a semantically ill-formed sentence and a novel instance of metaphor, irony or other indirect figure of speech, etc." Certainly from a linguistic perspective such an argument seems apt. However, it fails to consider the rich body of knowledge from psycholinguistic studies of all forms of language processing and indeed much of what is known about other realms of cognitive processes, that show varieties of dependencies upon contextual sources and linguistic input, and the intricate parallel blends of processing that can occur during different kinds of cognition. Indeed, recent psycholinguistic studies have shown that the mere knowledge of the occupation of a speaker can alter the very lowest levels of online processing of figurative language (see Katz, 2005, for a review), and indeed a variety of heretofore "psychological" or "contextual" influences (e.g., mood, emotional state, physiological status, and a vast array of others) have been shown to have tremendous impact on many allegedly impenetrable cognitive, perceptual and even sensory processes. There is thus a great body of evidence against the view that processing, linguistic and otherwise, involves multiple, sequential, distinct, impenetrable stages. Rather, processing can be influenced by parallel, multiple, and interacting sources of information (see Colston, 2005, for this argument in greater detail). Thus, although there are possible instances of an ironic computation that could require a garden-path type of two-stage meaning recomputation, most instances are more likely one-stage operations where contextual information is readily-enough deterministic and available at the earliest onset of processing to enable parallel processing of context and linguistic input to produce the ironic comprehension product directly.

One of the most important contributions of the Attardo (2001) paper is the detailed explication of the emerging, generally agreed-upon, necessary condition for an instance of ironic comprehension, involving some violation of the relevance, appropriateness, or manner in which an utterance is made. Consistent with the other enclosed paper that called for a violation of the Gricean Maxim of manner as one of three needed components of irony comprehension (Colston, 2000; the other two being a violation of expectations and a contrast of expectations and reality), Attardo specifically explicated this claim and offered a detailed discussion of differences between violations of relevance and appropriateness.

### CONTEXT IN IRONY COMPREHENSION

Beyond consideration of the comprehension of an utterance of verbal irony per se, other work has focused more exclusively on the role that context plays in the comprehension of verbal irony. The first paper we've selected on this topic is Gibbs's (1986) article on the comprehension and memory for sarcastic irony. This paper was among the first wave of research studies that initially challenged the standard pragmatic view that ironic and indeed all forms of figurative language first undergo an encapsulated literal meaning derivation phase that then must be subsequently overwritten by a secondary figurative meaning derivation phase once contextual in-

formation has shown the literal meaning to be incorrect. The Gibbs paper made such a challenge for verbal irony.

In six experiments the study revealed that there is no need to first derive the literal meaning from ironic utterances because contextual information comes into play early in the comprehension process (irony processing took no longer than processing of the same language used literally). Ironic language was also processed faster if it explicitly echoed previously mentioned beliefs or norms, also indicating the importance of context in irony comprehension. Memory for sarcastic utterances was also better than memory for the same utterances used literally, and explicit echo of previous information also increased memory for sarcastic utterances. The latter two memory results demonstrate the key role of context in irony cognition because, other than the greater involvement of contextual information in ironic remarks, especially ironic remarks that involve explicit echo, the utterances themselves were kept identical.

In challenging the then well-accepted standard pragmatic view of figurative language comprehension, the results of the Gibbs (1986) paper were sure to attract the attention of divergent accounts. The next paper we included is representative of works that have addressed the different claims and evidence of Gibbs's direct access account and more traditional accounts of verbal irony processing. Giora and Fein (1999) offered an account that proposed the concept of salient meaning to encompass the divergent to-date findings. Salient meanings are argued to be those that are always activated and always activated first. But they are not necessarily the same things as "literal" meanings. Instead, salient meanings are affected by conventionality, frequency, familiarity and prototypicality.

In two experiments, Giora and Fein (1999) found evidence to support the role of salient meaning in irony processing. In general, if the literal meanings of ironic utterances were coded in the lexicon (if the ironies were unfamiliar, for instance) then ironic processing took longer relative to ironies whose literal meanings were not lexically coded (familiar ironies). Giora and Fein thus concluded that direct access "may be a function of meaning salience, rather than of context effects."

The next study (Pexman, Ferretti, & Katz, 2000) took the evaluation of context, salience and processing to a new level by using a moving window paradigm than can more precisely reveal online processing of verbal irony. This study, which followed an early work on memory for sarcastic utterances that employed the same experimental materials and thus enabled correlational analysis between the two studies (Katz & Pexman, 1997), revealed a complex interaction of factors in irony processing. Contextual factors such as the occupation of the speaker, discourse factors like the nature of the discourse preceding the ironic utterance, the familiarity of the statement being made and the nature of the counterfactuality presented in the discourse, all play a role in very early processing of ironic utterances. The authors concluded that graded salience *and* contextual factors are operating in verbal irony comprehension.

The relationship between processing and memory of ironic utterances, first explored by the Gibbs (1986) paper, was also corroborated in the Pexman, Ferretti,

and Katz (2000) study. Recall that Gibbs found greater memory as well as faster reading times for echoic sarcastic utterances, relative to nonechoic, suggesting that something about the enhanced processing seems to lead to greater memory. The Pexman, Ferretti, and Katz paper found that both the degree of sarcasm and the likelihood of subsequent memory are predicted by specific amounts of times spent pausing at the word stream that immediately follows the sarcastic utterances.

The next paper comes from a very different perspective in using neuropsychological work to address the role of context in irony processing. The McDonald (2000) paper discusses two kinds of brain damage and how they differentially affect people's abilities with respect to verbal irony. People with damage to their brain's right hemisphere (RH) and people who've suffered traumatic brain injury (TBI) both show deficits of various kinds in their cognitive abilities, which in turn can affect their ability to understand verbal irony.

RH patients in very general terms have difficulty incorporating prosodic cues in the processing of irony, they have a diminished ability to infer the emotional states of ironic speakers, and they may have difficulty in understanding what is on the minds of other people. TBI patients generally show a greater loss of "communication" skill, relative to full language aphasias, and as a consequence can show an increased literal-mindedness in language comprehension. Their comprehension difficulties seem less directly related to emotional assessment problems, but rather seem influenced by more general inferential reasoning deficiencies. Most interesting for issues related to context, TBI patients also seem most impaired when the contradiction inherent in an ironic utterance is restricted to other utterances. When the contradictions are against other situational contextual cues, then performance improves. As an end result, TBI patients seem least affected at detection of irony, and most impaired at gleaning the illocutionary force of ironic utterances.

What these findings show is that much of the "normal" comprehension of verbal irony lies in mechanisms outside of pure "language" processing. Abilities such as prosodic evaluation, emotional assessment, flexible incorporation of related conceptual information, inference generation and theory of mind, are all deficient to one degree or another in RH and TBI patients, without there being significant parallel deficiencies in pure language abilities (e.g., aphasias are rare in these patients). That these patients then show straightforward difficulties in aspects of verbal irony comprehension thus singles out the importance of such processes for irony cognition.

Schwoebel, Dews, Winner, and Srinivas (2000) is the next paper we included from the literature on context in irony processing. This study revisited the different claims and evidence of direct access, the standard pragmatic model, and graded salience. The study attempted to establish the exact point at which the processing of an ironic utterance would slow down because of activation of the literal meaning of the utterance. Such a lag is universally claimed to happen by the standard pragmatic model, and is also claimed to happen by graded salience if the ironic meaning of the utterance is not overly conventional. None of the items used in this study were conventional ironies in this way. The study also attempted to test whether such a literal