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兰州大学外国语言文学专题研究文库

# Theories and Research in Experimental Pragmatics

Liu Si  
Robert M. Harnish  
Merrill F. Garrett

Pragmatics

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## Preface

**R**obert M. Harnish and Merrill F. Garrett are internationally influential professors in pragmatics and psycholinguistics. Chapters 5 to 12 of this book are their manuscripts based on their lectures in Beijing and Shanghai, China, with some modifications and supplements. These professors have licensed their manuscripts for publication in China's most influential academic press. Chapters 1 to 3 are my work; Chapter 4 is my work with Zhang Xiaoyan.

The main subject of this book is an introduction to the related theories and research in experimental pragmatics, which is a cross-disciplinary frontier research area that has developed rapidly in this century. It combines pragmatics, psycholinguistics and cognitive science. Experimental pragmatists attempt to probe how people understand implied meanings, clarify ambiguities, and identify "illocutionary force" in a conversation; or, how they appreciate metaphor, humor, and irony, etc. with the help of language knowledge and situational awareness. These questions have been issues of interest to researchers in both pragmatics and psycholinguistics. In the past, these two areas were mostly independent of each other. Pragmatics, in the course of its maturation, has relied on intuitive observation, analysis and reasoning; and has developed a variety of

different theories. In contrast, psycholinguistic research on language communications, in addition to its theoretical development, has cultivated special experimental research methods appropriate to the detailed study of the time line of language processing. Recently, researchers have begun applying psycholinguistic experimental methods to the resolution of the pragmatic posers that have long been controversial, to the exploration of brain mechanisms and the cognitive processes of “speech acts” and “implied meanings”, and to the search after the situational effects and psychological reasons for the utterance production and perception.

This book is devoted to the development of experimental pragmatics and its role as an emerging research field in China by the three advisors and student. The book could be described as a good-faith academic co-crystallization of the Sino-US scholars.

As the book was being finalized, Professor Robert M. Harnish passed from among us at the age of 71, after a long struggle against cancer. He left a definite gap in the place he occupied in pragmatics. His death is an enormous void in my academic life that will never be filled. During his last days, he continued to provide valuable comments on this publication. It is therefore my wish that the publication of this book would bring his soul some comfort. This publication carries with it the highest esteem and boundless gratitude from his student, a Chinese scholar, for his painstaking efforts to the development of pragmatics and his selfless dedication to the development of pragmatics in China. Let us all remember him.

This book is intended to provide a valuable source of knowledge and an important academic reference for researchers, instructors and graduate students at all levels, as well as senior undergraduate students, in pragmatics, semantics, general linguistics, psycholinguistics, cognitive linguistics, and other related disciplines.

**Liu Si**  
in Jincheng  
October, 2011

# CONTENTS

<b>Preface</b>	1
<b>Chapter 1 What Is Experimental Pragmatics</b>	1
1. 1 Introduction	1
1. 2 Present Focused Issues in Pragmatics	3
1. 3 Methodology of Experimental Pragmatics	10
1. 4 Chief Research in Experimental Pragmatics	12
1. 5 Conclusion	16
<b>Chapter 2 Conversational Implicature , Explicature and Implicature</b>	23
2. 1 Introduction	23
2. 2 General Conversational Implicature ( GCI)	24
2. 3 Explicature Theory	26
2. 4 Main Divergences between the Explicature and GCI	28
2. 5 Implicature Theory	29
2. 6 Discussion	31
<b>Chapter 3 Research I: Processing of Classification and Recognition of Chinese Speech Acts</b>	38
3. 1 Introduction	39
3. 2 The Experimental Problems	45

3.3	Pilot Experiments	46
3.4	Experiments	53
3.5	Conclusion	72
<b>Chapter 4 Research II: Testing Metaphor Processing Model for Chinese Proverbs</b>		81
4.1	Background	81
4.2	Related Research	88
4.3	Present Study	95
4.4	Results and Analyses	101
4.5	Discussions and Conclusion	105
<b>Chapter 5 Three Approaches to Speech Acts</b>		126
5.1	The Convention-Rule and Norm Based Tradition	126
5.2	The Intention-Inference Tradition	139
<b>Chapter 6 Speaking Nonliterally and Indirectly</b>		152
6.1	Nonliteral Speech Acts: Background and Current Issues	152
6.2	Indirect Speech Acts: Background and Current Issues	164
<b>Chapter 7 Experimental Pragmatics: Indirect and Nonliteral Speech Acts</b>		177
7.1	The Experimental Pragmatics of Indirect Speech Acts	178
7.2	The Experimental Pragmatics of Nonliteral Speech Acts	190
<b>Chapter 8 Conversational Implicature and Conversational Implicature</b>		204
8.1	Origins of Conversational Implicature	204
8.2	Challenges to Grice and Conversational Implicature	213
8.3	Understood Elements of Content	218
<b>Chapter 9 Cognitive Science Research</b>		223
9.1	Mind Design: the Computer Analogy	224
9.2	A Major Theoretical Principle: Modularity of Mind	225



9.3	A Second Major Issue: the Role of Consciousness in Mental Processing	229
<b>Chapter 10</b>	<b>Processing Resources and Limitations</b>	237
10.1	Language as a Complex of Mental Processes	238
10.2	Segmentation Problems	240
10.3	Word Retrieval and Syntax	244
10.4	Ambiguity Studies	245
<b>Chapter 11</b>	<b>Core Problems in Comprehension Studies</b>	249
11.1	Sentence Level Processes	249
11.2	Using the Neuroscience Side to Explore the Multi-systems Idea	257
11.3	Some Experimental Pragmatics	261
<b>Chapter 12</b>	<b>Research III: The Experimental Pragmatics of Implicature and implicature</b>	268
12.1	Experimental Pragmatics of Implicature: Categorizing What is Said vs. What is Implicated	268
12.2	Experimental Pragmatics of Implicature: Processing Models for What is Said vs. What is Implicated	272
12.3	Experimental Pragmatics of Implicature: A Test Case with implicature	275

# Chapter 1

## What Is Experimental Pragmatics

### 1.1 Introduction

“Experimental Pragmatics” is a new interdisciplinary study which combined pragmatics and experimental psycholinguistics together. It involves linguistics, philosophy, psychology and cognitive science and employs experimental methods to study the problem of cognitive mechanisms.

Although psychological experiments on pragmatic issues appeared in 1960s (Wason, 1961), the research that was really significant to pragmatics was studies during 1970s and 1980s. The psychological study in this period mainly related to cognitive process, such as, the processing of deixis, speech act and metaphor etc. (see 4.1). Psychological linguists, H. Clark and Lucy (1975), H. Clark (1979), Gibbs (1979, 1986), Glucksberg et al. (1982), should be accounted as pioneers of experimental pragmatics. In 1990, the term “Experimental Pragmatics” was finally used in the title of a research report (Nicolle and B. Clark 1999: 165) published in *Cognition*.

Up to now, the Experimental Pragmatics Conference has been

held four times. <sup>①</sup>The first was held in April 2005 and sponsored by the Art, Social and Humanity Sciences Research Center, the British National Institute of Cambridge University. The English Department of Cambridge University presided over the session with the theme of “Experimental Pragmatics: Exploring the Cognitive Basis for Conversation”. The arrangement committee pointed out in the notice that “Experimental Pragmatics is a brand-new field” and stressed that they hoped to bring about a new joint study by communicating novel ideas and results through this seminar.

Sperber and Noveck edited and published the memoir *Experimental Pragmatics* in 2004. B. Clark and Novech set up a special website about experimental pragmatics in order to facilitate experimental pragmatics researchers to exchange ideas and transmit information.

Robert Harnish, linguistic philosopher, and Merrill Garrett, psycho-linguist, at the University of Arizona, USA, were the first to offer experimental pragmatics as a graduate course in 2002. In the May of 2005, they were invited to give lectures in Beijing and Shanghai by the Foreign Language Department of Beijing University of Aeronautics and Astronautics (Harnish 2005a, b; Garrett 2005a, b). In August of the same year, scholars discussed the study of “experimental pragmatics” at the Ninth National Pragmatics Conference held in Fudan University.

Despite these good beginnings, the theory and method of experimental pragmatics are still unfamiliar to our Chinese researchers. Hence, it is helpful to provide a comprehensive review of experimental pragmatics. This article attempts to develop the following three aspects: (1) the major theory and focused issues in experimental pragmatics; (2) the study approaches; (3) the recent research achievements.

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① This conference series grew out of special sessions and Workshops that began to emerge in the late 1990's. These led to successful biennial conferences on Experimental Pragmatics across Europe, beginning with a version in Cambridge (2005) and followed by those in Berlin (2007) and in Lyon (2009). This year's the 4th Biennial Conference of Experimental Pragmatics was held on June 2-4, 2011 at the Universitat Pompeu Fabra in Barcelona, Spain.

## 1.2 The Present Focused Issues in Pragmatics

### 1.2.1 Theoretical Background

Grice (1989 [68]: 118 – 124; 1975: 44) attempts to emphasize the difference between logical semantics and language use by demarcating “What is said” and “What is implicated”. What is implicated consists of “conventionalized implicature” and “unconventionalized implicature”. The “conversational implicature” belongs to “unconventionalized implicature” and contains “generalized conversational implicature (GCI)” and “specialized conversational implicature”. The basic principles to infer implicatures are “cooperation principle” and the “four maxims”. Grice (1989 [69]: 96 – 97) deduces the processing of implicature as: When a speaker means to convey P, then he has an intention and would produce an utterance, in which he tries to make the hearer to know that P is the speaker’s intention, and to think P. The Gricean (for example, Searle 1979: 117 – 119; H. Clark and Lucy 1975: 58) inferred: to understand implicature, the literary meaning should be understood unconditionally at first; then, to check up by referring to context; if it was wrong, trying to understand implicature again.

Neo-Gricean (Gazdar 1979; Bach and Harnish 1979; Horn 1972, 2004, 2005; Levinson 1983, 2000) studied and developed the Gricean theory. For example, Levinson’s (2000: 35 – 38) “three heuristics”<sup>①</sup> was reduced from Grice’s “four maxims”, while there is big differences between them. The basic difference is: Grice’s “four maxims”

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① The “Three Heuristics” are: Q [quantity] -heuristics: What isn’t said, isn’t, which is based on the first maxim of “Quantity” by Grice; I [information] -heuristics: What is expressed simply is stereotypically exemplify, including the second maxim of “Quantity” by Grice; M [anner] -heuristics: What’s said in an abnormal way isn’t normal, the same as maxim of “Manner” by Grice.

put more emphasis on particular conversational implicatures instead of GCI; while Levinson's "three heuristics" gives more consideration to GCI.

Relevance theory proposed by Sperber and Wilson (1995 [86]), Carston (1991 [88], 2002, 2004a, b) and "post-Gricean"<sup>①</sup> holds that the speaker's intention is to offer a contextual "relevance" between literary meaning and implicature; and the hearer tries to understand implicature based on this relevant information. As Carston (2002: 127) points out that there are two perspectives of studying pragmatics: one is of philosophy, the other is of cognition; and that cognitive pragmatics, which is based on relevance theory, sets up a new concept of studying: "pragmatics is a psychological faculty and an information processing system" (p. 128). In addition, post-Gricean inferred implicature mainly depends on "context" without considering the function of language form in perception of the implicature.

Gu (2003) points out that there have been developed three branches centered on Gricean theory: One is "reductionists" represented by Sperber and Wilson, in which they reduce the four maxims of Grice's Cooperative Principle to a maxim of relevance paralleled with Cooperative Principle. Another is expansionists, represented by Leech, in which they expand Grice's Cooperative

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① According to the introduction of Horn when he answered questions on communication network of American Dialect Society in 2001: the terms "neo-Gricean" and "post-Gricean" were proposed by Levinson. At the Pragmatic Conference at Institute of Linguistics of Stanford University in 1987, Levinson and Horn distinguished between the "neo-Gricean" theory and "post-Gricean" theory clearly: the former theory is the inheritance and development of the traditional Grice's theory. The main representatives of neo-Gricean recently are "Presumptive Meanings" of Levinson in 2000 and Horn's publication (2004, 2005). The post-Gricean theory is incompatible with Grice's theory, in which the main theories are "Relevance Theory", including "Principle of Relevance" and "the Guarantee of Optimal Relevance". Main representatives are: Sperber, Willson, Carston, D. Blakemore, and récanati, Gibbs, and so on. Recently, post-Gricean posed the biggest challenge to Grice, that is, the inferences and cognitive mechanisms of "what is said".

Principle rather than reduce it. Levinson's generalized conversational implicature theory is an intermediary way of studying between reductionists and expansionists. Gu finds that there is a common ground in the three schools, and that is whether revision or neglect has been applied to the three important concepts in Grice's Cooperative Principle: "talk exchange", "transaction" and "common purpose". This accounts for the formation of the three different schools. By analyzing the merits and demerits of the three schools, Gu proposes a new way of study relying on "talk exchange" and "transaction"<sup>①</sup>, which is called the study of "multiple-goal neo-Gricean".

In addition, some scholars of pragmatics in China employ relevance theory to study pragmatic cognition (He Ziran 2006, He Ziran & Ran Yongping 1998, Qiu Tianhe 1998); some applies the neo-Gricean theory to the inference and cognition of Chinese implicature (Shen Jiaxuan 1997, 2004); some others make comments on neo-Gricean new theory and discuss the processing of pragmatic inference (Xu Shenghuan 1995, 1996, 1997; Qian Guanlian 1995). All of these scholars have made valuable contributions to the field. On the whole, however, there is hardly any study focuses on the recent arguments of different points of view between various pragmatic schools, and hardly any experimental pragmatic study has been conducted in China.

### 1. 2. 2 "Implicature" and Its Related Theories

Implicature is a term coined by Bach (1994) from the word "implicit". As for the phenomena that implicature is referred to, Implicature has already drawn attention as a study subject of pragmatics in North America and Britain. With regard to its content, implicature is "extended meaning", for example, in the Chinese concept (in the utterance "it is raining [here]", "here" is an

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① According to Gu Yueguo's explanation: "Grice's transaction" is similar to the usage of economics, which refers to achieve certain goals through communication activity; the activity refers to both the language activity and non-language activity.

“extended meaning” without literality). The different points of view and inferences of the extended meaning are discussed as follows (For further discussion, see 8.3):

Grice (1975) has restricted “What is said” to the sphere of formal semiotics and truth value semantics and embraced various kinds of implicatures into “What is implicated”. Grice’s definition of GCI was similar to “implicature” and he gave a single example. “X is meeting a woman this evening” (Grice 1975: 56). “A woman” mustn’t be X’s wife, sister or close friend. If it is, the speaker would say “X’s wife, X’s sister or X’s friend xxx.” It is obvious that there is GCI in the utterance: “the woman X will meet is not his wife, sister or close friend.” Neo-Gricean (Horn 1984; Levinson 1987) inferred implicature depending on the Quantity and Relevance Maxim.

Sperber and Wilson (1995 [86]: 182) propose different ways of distinction and definition to conversation, that is, the distinction and definition of “explicature” and “implicature”. “Implicature” fundamentally continues to adopt Gricean theory, while “explicature” is a revision and development to it. They and Carston (1991 [88], 2002, 2004a, b) regard the logical meaning and the extended meaning of “What is said” as “explicature”; for example, “I have eaten breakfast [today]” ([today] is the extended meaning), which both are “explicit” and whose meanings are “explicatures”. The extended part is not GCI (or “What is implicated”), but a part of “What is said”. The fundamental difference between “explicature” and “what is said” lies in the following: “explicature” emphasizes the characteristics of communication, which is to say that its meaning depends on not only the form of utterance but also the context. However, Grice restricted “what is said” to semantic propositions decided by linguistic form. Sperber and Wilson (1995 [86]: 183) suggest that the “explicit side” of conversation contains richer and more logical meaning. So that, it deserves more study than classical Gricean pragmatic theory. They still employ Relevance Theory to deduce the cognitive process of explicature and they also think context is decisive to understand this kind of meaning.

Bach (1994: 140) suggests “implicature” compose of “completion” and “expansion” implicatures on the basis of formal semantics, so it is not implicature beyond “what is said”. Bach defines implicature in a strict semantic scope and thinks it is restricted by word meaning, structure and semantics. This is in accordance with Grice. His thought of implicature is not something beyond what is said goes against Grice’s theory and agrees with Relevance Theory. Bach deduces (p. 133) that linguistic form should be perceived at first in understanding implicature; and he (Bach 1998: 4) suggests that we express and understand implicature and implicature (or non-literality) through the process of “standardization”.

Levinson (2000) suggests GCI is similar to implicature. In his point of view, GCI is conveyed by the idiomatic meaning and common sense of the language, which can be understood without a context. Under the frame of GCI, Levinson (1995, 2000) proposes a mode of “default reasoning”. He thinks the mode has two important characteristics (2000: 45): it is default and cancellable. A typical example is “Some [not all] of the guests have left the party (see 2.3)”. He accounts for the reason why there appears extended meaning by proposing the I-Principle (p. 37). In the course of conversation, he thinks, speakers would economize their expression, while the hearers would understand as extended as possible, and “stereotypical” reasoning is the basis of utterance interpretation.

Récanaati (1991 [89], 1993, 2002) agrees with the school of Relevance Theory on the analysis of “explicature”, though there exist divergences. He (1991: 101, 1993: 240) emphasizes “explicature” should be distinguished as the “minimal” and the “enriched”: “minimal proposition” is the meaning on the level of utterance semantics in Gricean theory; “enriched meaning” is the meaning that depends on pragmatic context. He also proposes the theory of “availability” with the belief that there are two levels in reasoning in pragmatic cognition. On the first level, the minimal proposition would be processed, then “enriched meaning” would be processed on the second level through



“strengthening” and “expansion” .

The central point of the above mentioned divergence is: how the cognitive mechanism of brain functions on the enriched meaning. This problem arouses an argument of various points of view and pushes the study of “What is said” to an unprecedented important position. At the same time, it also propels the development of experimental pragmatics.

### 1. 2. 3 Scalar Implicature

Scalar implicature is a part of implicature. It is discussed particularly here because it involves some salient problems.

Horn (1972) proposes a theory of lexical grading, which has been called “Horn’s scale” later. Scaled word class means the word class containing the concept of scale. For example, the English numerals (one, two, three) constitute a typical kind of scaled word class. And, there are also other scaled word classes: indefinite numerals (some, many, most, all), conjunctions (or, and), adverbs (sometimes, always, often), adjectives (warm, hot), modal verbs (may, should, must), verbs (know, believe) etc. “Scalar implicature” means implicature conveyed by the scaled word classes in conversation.

Many researchers (Grice 1975; Horn 1972, 2000; Hirschberg 1985; Carston 1991 [88], 98; Levinson 1983, 87, 2000) have expounded on scalar implicature from the perspective of pragmatics. The divergence mainly exists between the neo-Gricean and the post-Gricean.

Levinson (1983, 2000) has studied scalar implicature thoroughly. He suggests that under what he calls the Q-Principle, “Scalar Q-implicature” can be deduced by employing “default reasoning” (2000: 76): take some scaled word classes for example < all, many, some >, if the speaker uses words of low levels (such as “some”) instead of words of high levels (such as “all”), then he knows it is not “all” in fact, so he cancelled the implicature of “all” and used “some”, in example [1]. The implicature of “some” is cancellable vice versa, such as [2]: