当代语言学研究文库

言语幽默的图论模型

A Graph-theoretic Approach to Verbal Humor

刘乃实 著

上海交通大學出版社

上海交通大学学术出版基金资助项目

当代语言学研究文库

言语幽默的图论模型。

A Graph-theoretic Approach to Verbal

Ver蹟 Humon

刘乃实 著

上海交通大學出版社

内 容 提 要

本书立足于语言学传统的幽默研究,在前人研究成果的基础上提出了"笑话的简式图论模型",开创了研究幽默文本特别是笑话的一条新途径。全书内容翔实,深人浅出,并用大量的幽默语料向读者揭示笑话之所以令人发笑的深层动因。全书用清晰易懂的英文写成,适合有一定英语基础的语言学专业的学习和研究人员以及对英语幽默语言感兴趣的广大读者。

图书在版编目(CIP)数据

言语幽默的图论模型/刘乃实著.—上海:上海交通大学出版社,2008

(当代语言学研究文库)

ISBN978-7-313-05288-9

I.言... Ⅱ. 刘... Ⅲ. 幽默(美学)—语言艺术—研究 Ⅳ. H019

中国版本图书馆 CIP 数据核字(2008)第 117188 号

言语幽默的图论模型

刘乃实 著

上声文 3 大學 出版社出版发行

(上海市番禺路 951 号 邮政编码 200030)

电话:64071208 出版人:韩建民

昆山市亭林印刷有限公司 印刷 全国新华书店经销 开本:787mm×960mm 1/16 印张:10.5 字数:162千字

2008年11月第1版 2008年11月第1次印刷 印数:1~3050

ISBN978-7-313-05288-9/H·852 定价:22.00元

幽默研究的历史源远流长,甚至可追溯到现代文明的萌芽时期。作为一种可资研究的学科题材,幽默现象受到了来自传统语文学、文学、社会学、心理学、语言学和文化研究等领域的广泛关注。

在现代意义上,真正定位于语言学框架内的言语幽默研究则以 Raskin (1985)的幽默语义脚本理论(SSTH)和 Attardo & Raskin (1991)的言语幽默一般理论(GTVH)为典型代表,但它们未能充分揭示幽默解读的本质。本书的笑话简式图论模型(RGMJ)正是建立在这些理论的基础之上,并从 Attardo 等人初步创制的图论(Graph Theory)模型中发现问题,发展并深化了从幽默形式化方面的研究,从而开创了研究言语幽默,特别是笑话的一条新途径。本书的研究成果还克服了 Raskin 和 Attardo 等人传统理论的一些缺陷,深化了从语言学层面上对幽默本质的认识。

在实际应用上,笑话简式图论模型有数理逻辑的基础,同幽默语篇的结合又可以体现话语分析的特色。利用图论模型对配对式言语幽默研究有助于幽默语篇的分类和幽默在教学中的应用,并为幽默理解的计算机化创造条件。由于国内长期以来实行话语分析传统的幽默研究,严格意义上的幽默语言学方面的专著,特别是偏重幽默机制的抽象和形式化方面的专著几乎没有,因此从一定意义上说,本书不同于其他"漫谈"式的关于幽默的专著。由于具有较强的现代语言学和数理逻辑的理论背景,本书的出版将填补一项空白并向国内学界展示计算幽默学这一新兴学科的若干特点。本书的另一个重要特点是完全用清晰易懂的英文写作,从而方便懂英语的读者充分理解英文术语和理论的实质。

本书的第1章是概览,对幽默和语言学的幽默研究作了大致

前言

的介绍;第2章进一步从定义和分类上逐步向读者呈现语言学视野中幽默的内涵和外延,并介绍了发展至今的主要理论流派;第3章和第4章分别讨论了幽默语言学派中的两大支柱——SSTH和GTVH,它们也是笑话的简式图论模型的基础。

建议接触过 SSTH 和 GTVH 的读者直接阅读本书的主体部分——第5~8章,它们从对 GTVH 的要素抽象开始,逐步过渡到笑话简式模型的结构、顶点算法和边算法,从而使读者循序渐进地了解到这一幽默形式化理论的全貌。

最后一章是全书的总结,回顾了书中涉及的所有要点,最后附有全书的参考文献。

"读一本幽默书要比读一本解释幽默的书更有意思"(A. Ziv, 1984),但写一本解释幽默的书远远要比写一本幽默的书困难。所幸在写作过程中,笔者得到了众多师友的帮助,在此恐无法——列举,但特别要感谢的是导师熊学亮教授,不管是从个人的角度还是从学术的意义上,他不仅孜孜不倦地审校了各个章节,而且在最后成稿的各个环节中提出了宝贵的意见和建议。"上海交通大学学术出版基金"为本书的出版给予了极大的支持和帮助。最后,谨以此书献给所有站在笔者和此书背后的人们,没有他们,也就没有本书的成功面世。

刘乃实

List of Abbreviations

GTVH General Theory of Verbal Humor

KRs Knowledge Resources

LA Language

LM Logical Mechanism

NRR Non-reversed Relationship

NS Narrative Strategy

RGMJ Reduced Graph Model of Jokes

RR Reversed Relationship

SI Situation

SO Script Opposition

SSTH Semantic Script Theory Humor

TA Target

Contents

Chapter i introduction / 1
Chapter 2 A Survey of Literature / 3
 2.1 Definition of Humor / 3 2.2 Classification of Humor / 5 2.3 Theories of Humor / 8
Chapter 3 The Semantic Script Theory of Humor (SSTH) / 12
 3.1 Script-based Lexicon / 12 3.2 Combinatorial Rules / 17 3.3 Main Hypothesis of SSTH / 19 3.4 Analysis of a Sample Joke / 23 3.5 Summary / 25
Chapter 4 The General Theory of Verbal Humor (GTVH) / 27
 4.1 Introduction / 27 4.2 Knowledge Resources (KRs) / 28 4.3 Hierarchy of the KRs / 34 4.4 Summary / 35
Chapter 5 Formal Extension of GTVH / 37
5.1 Logical Mechanism Revisited / 37

ъ
4
유
≚
ㅗ
₹
8
ā
≅ .
C
➣
무
₹
8
፸
\equiv
ᇴ
<
9
햣
쁘
I
⊑
mor
윽

5.4	Summary / 60
Chap	ter 6 Architecture of a Reduced Graph Model of Jokes(RGMJ) / 63
6.2 6.3 6.4 6.5 6.6	Preliminary Remarks / 63 Attributes / 64 Vertices / 70 Edges / 72 Subgraphs / 75 Paradigm of RGMJ / 78
Chap	ter 7 Static Configuration—A Vertex-calculus Account / 85
7.2	Vertex Calculus / 85 Standardization / 95 Distribution Pattern / 111
Chapt	ter 8 Dynamic Inferential Path—An Edge-calculus Account / 132
8.2	Preliminary Remarks / 132 Rule System / 135 Examples / 139
Chapt	ter 9 Conclusion / 149
Biblic	ography / 158

5.2 Set-theoretic Account / 515.3 Graph-theoretic Account / 55

CHAPTER 1

Introduction

Humor pervades our lives. It exists in almost every part of the world. We can find humor almost ubiquitously in our daily conversations, on televisions, in newspapers and so on. There exists no subject that has not been joked about in one way or another. A sense of humor is a unique feature, or to be more exact, a gift shared by all normal human beings. Nonetheless, the animal kingdom can only bemoan its inadequacy in the face of this challenge. Explanations and studies of this intriguing human behavior have been recorded as far back as the early Greeks, from Plato and Aristotle, through Kant, to the more recent Bergerson and Freud, a history probably as long as that of culture.

Overall, the study of humor is a fascinating area: not only because its role is so crucial to our social communication in society, but also because any achievement made by our research will provide us with some glimpse of the interactive powers that we routinely employ in order to communicate either humorously or non-humorously.

Humor is a multi-disciplinary field of research. A comprehensive study would involve scholars from various fields like philosophy, psychology, anthropology, sociology, linguistics, literature and so on and so forth. However, in this book, what interests us most is a exploration of humor from a linguistic perspective. Before the publication of Raskin's seminal book in 1985, the linguistic research on humor remained in its infancy. It is his book that helps the

linguistic study of humor enter its adolescence. Both the Semantic Script Theory of Humor (SSTH) proposed by Raskin and its extended and revised version the General Theory of Verbal Humor (GTVH) will be introduced at length in the following chapters. The original work: A Graph-theoretic Account of Humor is to be done by embracing some basic tenets of the above two theories.

Nonetheless, it is unrealistic at present for us to attempt a complete and all-encompassing theory of humor, which will be a gigantic task taking decades or even centuries to complete. Instead the scope of enquiry will be restricted to merely a limited range of data and the analyses will be framed in a more formal way. The formal tool we adopt is Graph Theory borrowed from mathematics, which offers a richer description of humor and opens up a line of research which could profitably be pursued further. It is hoped that the creative work in this book will represent one small step towards the long-term goal of developing an integrated theory of humor.

The main body of this book comprises seven chapters. Chapter 2 is devoted to a general literature review of humor research throughout history. Chapters 3 and 4 introduce the two most canonical theories (SSTH and GTVH) in the province of the linguistic study of humor, respectively. Chapter 5 provides a careful analysis of the first attempt at modeling humor graphically. Chapters 6, 7, and 8 present the original contribution, RGMJ, by incorporating jokes into the framework of Graph Theory, and provide an in-depth exploration of all related issues. The last chapter argues about both the strong and the weak points of RGMJ and points out the fields for future explorations.

In order to provide a rough idea of the territory of humor, it is necessary to review some major related works in the literature in the following chapter.

CHAPTER 2

A Survey of Literature

2.1 Definition of Humor

Humor, as a subject, has been studied for thousands of years. The ability to appreciate and enjoy humor is universal and is shared by all people. Yet, there is still quite a lot of controversy about what humor is. There exists no single definition of humor that can satisfy all researchers. Just as the three blind men who touched the various parts of the elephant's body offered varying descriptions of it, different scholars provide different definitions that account for certain aspects of humor. Goldstein and McGhee do not even attempt to define humor "for the simple reason that there is no single definition of humor acceptable to all investigators in the area". (Apte, 1985:13)

Though a formidable task it appears, we cannot avoid the important issue of specifying what is meant by the key term "humor" and how this category is determined since humor is the subject in this book.

As a starting point, let us first refer to the archaic origin of this term. The term "humor" has its origin in Latin, meaning fluid or moisture. According to ancient physiology, there were four basic bodily humors or fluids: choler / yellow bile, melancholy / black bile, blood, and phlegm. The four humors functioned in determining one's mood or temperament. His "temper" was dependent on which of the four humors preponderated. A person in

whom the four humors were in correct balance was thought of as being in "good humor"; whereas a person with any kind of imbalance was said to be "out of humor", or eccentric. Through centuries of changes, the meaning of the term gradually narrows down to a specific mood or disposition, characterized by a sensitivity to, or appreciation of ludicrous, absurd, or comical events.

To take a look at the more recent version, let us quote part of Webster's 11th Collegiate Dictionary, which defines humor as:

- a) that quality which appeals to a sense of the ludicrous or absurdly incongruous;
- b) the mental faculty of discovering, expressing, or appreciating the ludicrous or absurdly incongruous;
- c) something that is or is designed to be comical or amusing.

If we take a closer look at the above definitions offered by Webster's, it is fairly obvious to find that these definitions emphasize several distinct aspects of the term. Some refer to the thing, idea, or event per se as humor; some regard the quality or features of those as humor; some attribute humor as something existing in our mind rather than in the real world; while others equate humor as a human cognitive faculty which functions in the perception of humor.

Similarly, different scholars, in their attempt at defining the term, tend to emphasize different aspects of humor depending on their varying purposes and orientations in research. In this book, we shall follow the suit of two famous humor scholars by defining humor in a very general sense.

One scholar is Attardo (1996), who defines humor as a technical term covering anything that is (or may be) perceived as funny, amusing, or laughable. Raskin (1985) proposes to consider "humor" in the least restricted sense, which is interchangeable with "the funny".

As for our work, it suffices to adopt a general definition, taking humor as an all-inclusive term, covering the types of stimulation that are perceived as funny and can elicit laughter, or that at least intends to do so. This definition will do for the time being.

2.2 Classification of Humor

There has been a widespread disagreement about how many different kinds of humor exist. Through centuries, efforts have been devoted to providing a unifying classification of humor, but with no exception, any such effort is doomed to fail in the end. Why? Just as different people define the term "humor" from different perspectives, they tend to categorize humor based on different criteria. Hence, it is not really a meaningful question to debate over the dissimilarity in categorizations offered by distinct scholars. Some classifications are based on the structure of humor; whereas others are based on the semantic content, style of expression, and a host of other qualities. The conclusion reached depends on the specific criterion used in conceptualizing humor.

If we take a stylistic or rhetorical approach, we will face a family of related terms like satire, anecdote, irony, farce, parody, joke, comedy, cartoon, pun, etc; if we select the semantic content (or target) approach, we will have categories like political humor, sexual humor, religious humor, Jewish humor, Clinton's humor, Bush's humor, etc. Luckily, it is not imperative at present to draw a precise picture of all these terms, since a clear demarcation among them is not regarded as ultimately pertinent to the major topic of this book. Therefore, we would like to adopt a rather simplified approach, i.e., to be more general than specific.

To begin with, let us differentiate between humor produced with language and humor produced without language.

If you are asked what makes you laugh quite often in everyday life, what springs to your mind is probably a picture of someone telling a joke or making some witty remarks in conversations or on televisions. What tools do people have to use when telling a joke? Obviously, language—the most common means of communication in both humorous and non-humorous ways.

Our lives thrive on uses of language with intent to create humor. However, in some cases, humor can be achieved by non-verbal stimuli as well, that is, without any resort to language. An amusing picture of Charlie Chaplin's oversized shoes, a ludicrous piece of furniture, or a funny dress can all make people laugh. Besides those static stimuli, there are dynamic ones-moving objects or physical actions-that can yield humor as well. For instance, when you see a person who slips on banana peels, slides around on slippery floors, falls into a water trough accidentally, gets cakes in the face, or sits on the ground when the chair is pulled away, you cannot help but be amused by these stimuli. Similarly, when two clowns slap and kick each other, or when they fall down or make funny faces, it surely is humorous too. In most cases, a dynamic stimulus is more effective than a static one in making people laugh. Compared with humor produced by linguistic devices, nonverbally created humor travels farther and wider across different times and cultures. They can readily surmount the barrier of language, and easily overcome the discrepancies among societies, races, and nationalities.

Thus we can make an accurate delineation of these two major types of humor; one type can be termed as nonverbal humor, which refers to a humorous situation that is not created or expressed by language. The other is called verbal humor or verbally expressed humor, which refers to humor "conveyed or expressed by means of a linguistic system" (Ritchie, 2004). Nonverbal humor is not the focus of this book; instead, verbal humor will be our primary concern.

Preliminary to detailed discussions, we must address another issue, i.e., what specific genre of humor makes up the material of study. At the offset of this section, we enumerate several types of humor in terms of a stylistic classification, e.g., genres like satire, parody, comedy, joke, etc. Sometimes, one will be puzzled by these

terms, since there is not a clear-cut dichotomy between any two terms and they overlap with each other in certain ways. Even worse, some genres are used sometimes interchangeably with each other. This fact has hampered many studies since consistency is a necessary condition if one is to draw valid conclusions from the data.

In this book, another simplification is adopted by choosing jokes as the major target of study. A joke, as is traditionally defined, is a relatively short text characterized by a punchline at the end, and deliberately designed to elicit humorous responses. Although there are other forms of humorous materials, a joke is considered to have a certain degree of prototypicality.

A joke gets passed around and repeated for quite a lot of times, and is often isolated from a specific context of use, which makes it fairly easy to study. Nonetheless, this does not mean that comprehension of a joke is not dependent on contextual factors, personal opinions, and the essential cultural background. The advantage of this simplification lies in that we do not have to investigate simultaneously all the contextual elements involved in a complicated phenomenon.

Several other strong points are also intimately related with jokes as the target of study. For instance, jokes are relatively short and self-contained, and easy to reproduce in a wide range of contexts. Jokes are short, which renders them more manageable for the analyst (Ritchie, 2004). Moreover, when providing a formal graph-theoretic account of humor, it is more likely to succeed in presenting a real formal description of the restricted body of jokes. If success can be made with jokes, the result of this study will potentially benefit explorations of other more complex genres of verbal humor, and eventually pave the way for a more comprehensive theory of humor at large.

Due to their simplicity and controllability, in fact many other scholars give priority to jokes in their study as well. That is why jokes, as a prototype of humor, have received the most attention in linguistic studies of humor.

2.3 Theories of Humor

Interests in humor date back to the classic antiquity. On the list of famous theorists, we could find great names like Plato, Aristotle, and Cicero. In the more recent literature are Beattie (1776) and Kant (1790). The turn of the 20th century witnesses a burgeoning literature on humor in the psychoanalytical discipline, marked by the famous book written by Freud in 1905. From 1970s to 1980s, humor research reached its heyday, particularly in the field of psychology, sociology, anthropology, and also linguistics. Since ancient times, the heterogeneous nature of humor research has complicated the matter of classifying these theories. Traditionally, theories concerning the nature of humor are often clustered into a tripartite division of incongruity, superiority, and release "theories" (Raskin, 1985). Attardo (1994) generalizes these labels to cognitive, social, and psychoanalytical (see Table 2-1, with slight changes). There, of course, exist approaches to humor which cannot be easily subsumed under any one of these labels.

Table 2-1 Three Families of Humor Theory (Attardo, 1994)

Cognitive	Social	Psychoanalytical
Incongruity	Superiority	Release
Contrast	Aggression	Relief
	Hostility	Sublimation
	Triumph	Liberation
	Derision	
	Disparagement	

Now let us examine these theories one by one.

2.3.1 Superiority Theories

The assumption of the superiority theory is that we laugh at the misfortunes of others; it reflects our own superiority. Plato suggests that humor is some kind of malice toward people that are being

considered relatively powerless. Consistent with this view, Aristotle suggests that the comedy is; an imitation of men worse than average; worse, however, not as regards any and every sort of fault, but only as regards one particular kind, the *Ridiculous*, which is a species of the *Ugly* (De arte poetica, quoted after Raskin, 1985: 36).

Thomas Hobbes ($1588 \sim 1679$) makes most forcefully the claim that laughter arises from a sense of superiority of the laugher towards some object (what is commonly referred to as the "butt of the joke"). He simply states:

The passion of laughter is nothing else but sudden glory arising from some sudden conception of some eminency in ourselves, by comparison with the infirmity of others, or with our own formerly. (Hobbes, 1651: 46)

Hobbes further explains that humans are in constant competitions with each other, and looking for shortcomings of other persons. Laughing at the inferior builds our self-confidence and makes us feel superior. Because of their emphasis on the interpersonal and social aspect of humor, superiority theories are of considerable interest to the sociolinguists of humor.

2.3.2 Release Theories

Release theories have a clear physiological or psychophysiological nature (Rutter, 1997). This kind of humor theory has been advocated in various forms. The most influential proponent of a release theory is the towering figure—Freud, whose psychoanalytical work on humor forms the basis of psychological humor research. Freud (1905) speaks of "the release of comic pleasure" and believes that it is the release and the relief as well as the pleasure derived from them that are characteristic of humor.

He also maintains that humor "releases" tensions, psychic energy, or that humor releases one from inhibitions, conventions,