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Multimodal Analysis and Corpora for Research and Teaching

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Traditional Linguistic Analysis

- Focus on structure
- Single dimensional
- True of almost all levels of analysis, including text-level analysis

However, human interaction is shown to

- Involve multiple modalities (多模態)
- Simultaneously (共同作用)

The Multimodal Organization of Human Action

Charles Goodwin

Applied Linguistics, UCLA

Human action is built through the co-articulation of different kinds of signs in different media which mutually elaborate each other, and in so doing become environments for each other. Talk itself contains multiple sign systems with alternative properties. Strips of talk gain their power as social action via their placement within larger sequential structures, encompassing activities, and participation frameworks constituted through displays of mutual orientation made by the actors' bodies. The body is used in a quite different way to perform gesture, again a class of phenomena that encompasses structurally different types of sign systems. Both talk and gesture can index, construe or treat as irrelevant, entities in the participants' surround. Moreover, material structure in the surround, such as graphic fields of various types, can provide semiotic structure without which the constitution of particular kinds of action being invoked through talk would be impossible. The construction of action through talk within situated interaction is thus accomplished through the temporally unfolding juxtaposition of quite different kinds of semiotic resources. Data is drawn from videotapes of human interaction recorded in range of natural settings including conversations, archaeological excavations, and interaction in the home of a man with severe aphasia.

Introduction: Multimodal interaction

Tanya Stivers / Jack Sidnell

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Abstract

That human social interaction involves the intertwined cooperation of different modalities is uncontroversial. Researchers in several allied fields have, however, only recently begun to document the precise ways in which talk, gesture, gaze, and aspects of the material surround are brought together to form coherent courses of action. The papers in this volume are attempts to develop this line of inquiry. Although the authors draw on a range of analytic, theoretical, and methodological traditions (conversation analysis, ethnography, distributed cognition, and workplace studies), all are concerned to explore and illuminate the inherently multimodal character of social interaction. Recent studies, including those collected in this volume, suggest that different modalities work together not only to elaborate the semantic content of talk but also to constitute coherent courses of action. In this introduction we present evidence for this position. We begin by reviewing some select literature focusing primarily on communicative functions and interactive organizations of specific modalities before turning to consider the integration of distinct modalities in interaction.

Lexico-grammar: Vocab; syntax; formulas

|Asian 100 Gesture Exercise (2): Identifying Gesture Units and Phases (based on the Kendon (2004) notations)

L: ...What- what do you do when you're feeling bad,

RH | ~~~***** / *****-.-. |

you are in a bad mood.

What- .. what perks you up.

What- .. makes you feel better.

R: I cook.

Multimodality

- Lexico-grammar: vocab; syntax; formulas
- Prosody: pitch height, intonation contour, stress; pace, rhythm, etc.
- Gesture

Multimodal (Discourse) Analysis

- Simultaneously deals with different modes of communication;
- Wide scope
- Can be taken in different directions.



ROUTLEDGE
HANDBOOKS



The Routledge Handbook of Multimodal Analysis

Second Edition

Edited by Carey Jewitt

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A broad notion: Analysis of communication in all its forms

- Semiotic resources other than language, in interaction with each other and with language – such as gesture, gaze, proxemics, dress, visual and aural art, image-text relation and page-layout, cinematographic and sound design and production resources, etc.

(O'Halloran, K. L. and Smith, B. A, (2014). Multimodal Studies. In K. L. O'Halloran & Bradley. A. Smith (eds) *Multimodal Studies: Exploring Issues and Domains*. New York & London: Routledge)

A Narrower Definition

Multimodal Discourse Analysis

- Examination of the interaction of lexicogrammar, prosody, and body language.
- Focusing on Interaction and Grammar
- Based on linguistic multimodal corpora

Common Questions

- How to construct multimodal corpora?
- How to exploit multimodal corpora?
- Can text corpora and multimodal corpora complement each other? If yes, how?
- What about Chinese (research and teaching)?

MM Data Used for This Talk

- UCLA (& Lancaster) Spoken Chinese Corpus
- LDC CallFriend
- CALPER: Center for Advanced Language Education and Research (Chinese portion)
- UCLA Video Clips Project for Language Teaching

Part I: MMC for Research

- Part II: MMC for Research & Teaching
- Part III: MM Corpora

Prosody and Grammar in Interaction

Case Study 1: Discourse/epistemic markers

- Prosodic change reflects pragmatic strengthening & syntactic change
- The case of the discourse/epistemic markers 我不知道 *wo bu zhidao* 'I don't know' and 你知道 *ni zhidao* 'you know' in Chinese
- From propositional to epistemic / interactive devices

Case Study 2: Gesture in interaction

- Gestures are used to serve various rhetorical and interpersonal functions
- These functions are not obvious from speech/words alone
- Co-speech gesture: mutually elaborate each other

Thus

- Multimodal data provide new avenues for research
- New dimensions for understanding the way human communication works
- How language works together with other modalities

What this entails:

- Language learning beyond lexical grammar (doing and acting)
- How to expose learners to multimodal information?
- How to translate MM research into classroom teaching?

Prosody in Discourse & Pronunciation Teaching

Characteristics of Textbook Pronunciation

- Slow speed
- Clear enunciation
- Standard accent

Any problems?

- Affect/Emotion
- Perspective
- Communicative purpose

Sample Instructions (I)

- Play the clip and listen to it in its entirety.
- Then play it again – one utterance or short stretch at a time – and repeat what the speakers say.
- Take particular care to emulate the prosodic features of the speakers.

Explicit Instructions

Listen to the audio clip one last time and decide if each of the following utterance or part of the utterance is lengthened (L), stressed (S), has a rising intonation (R), or has an expressive intonation (E).

1) _____L _____S _____R_____E

便宜多了

2) _____L _____S _____R_____E

四五千呢

3) _____L _____S _____R_____E

你还是应该买一件儿

4) _____L _____S _____R_____E

给我难受死了

SLA and the Body: A New Agenda

- Unique gestures with cultural biases
- Deployment of the body in meaning-making
- Interaction of linguistic structure, prosody, and body gesture

日本人的肢体语言

2007-08-19 来源: 和风论坛 【大中小】 评论: 0 条 收藏



日本人接触的多了，发现他们的肢体语言很丰富。所谓姿式助说话，发挥的淋漓尽致。现简单介绍如下：

1. 单手手心朝下，作割脖子动作。这个动作可与死亡、暴力、自杀什么的没关系。这是"没了工作"的意思。日语为"首になる"。可译为"辞职或解雇"。俗点儿的可译为"炒鱿鱼"、"丢了饭碗"。大概是没了工作就等于没了活路，跟抹脖子差不多。



2. 两手食指从头的两侧向上伸。这个动作的意思是"生气、发火、发怒"。根据程度的不同可译为"怒る、かんかんになる"等。



3. 单手五指并拢，从颧骨向下颞作切割状。这个动作意思是"匪徒、强盗、坏蛋"。这是因为过去的恶人经常动武，脸上常有刀伤的伤疤，因此而成。日语可译为"やくざもの、悪いやつ"。

4. 单手握拳在另一只手心向上的手掌上作划圆摩擦状。这个动作意思是"流须、拍马屁"。文一点儿的可译为"现殷勤、阿谀奉承"等。日语叫"ごまをする"。这个意思的直译为"磨芝麻油"。但不知为什么磨芝麻油就是"拍马屁"。可能是马拉的磨吧。

List Gestures and Their Implications

1 Introduction

List constructions (or list constructions) are a common conversational practice in Mandarin Chinese. An example of a list construction is as follows:



Figure 1: List gesture (featuring a & b).



Figure 2: List gesture (featuring a & b).



Figure 3: List gesture (featuring a, b, & c).



Figure 4: List gesture (featuring a, b, & c).

Mutual Elaboration

R: ..你打电话? 哎, 让我老头陪你去吧。 [straight-up posture]

Y: ...为什么让你老头陪我去?

R: ..因为我-我现在急着录这个嘛。因为我那个什么, 我今天晚上有家教。我老头正好在研究室。他正好没事干。

(smile)你赶快让他陪你去吧。
hand gesture

[他无聊]死了。 hand gesture

Y: ..[你让-] 你让他上我们宿舍,



Let my boyfriend go with you.

He's bored to death probably.



Part III: MM Corpora

- Part I: MMC for Research
- Part II: MMC for Research and Teaching
- Part III: MM Corpora

MMC Construction: Sample Approaches

Localized R&T: Some Simplistic Models

a) Research & teaching goals: Multiple corpus resources & combinations

b) Same MM resource: Research and teaching exploitations

Center for Advanced Language Proficiency Education and Research (CALPER), PSU

- <http://calper.la.psu.edu/> → Chinese
- <http://calper.la.psu.edu/chinese.php>
- National Foreign Language Resource Center

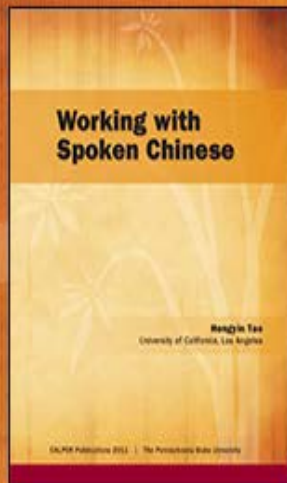


- Integration of **Audio/(Video)/Text/Concordance/Discourse Analysis**

Working with Spoken Chinese

by Hongyin Tao, UCLA

Companion Website to the Textbook



©2011 CALPER Publications

ISBN: 978-0-9793950-8-6

[Purchase the textbook](#)

This site accompanies the textbook "Working with Spoken Chinese." For each of the ten units of the textbook, there are three versions of the unit (without annotations, with Pinyin, with selected line-by-line commentaries), a vocabulary list, and core exercises.

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Unit Overview

[Unit 1 Travel Adventures 旅行奇遇](#)

Story telling, Elements of a Story (Who, When, Where, etc.), Addressee Behaviors in Story

[Unit 2 Fashion Fever 流行装](#)

Comments on Fashion Styles, Expressing Agreement/Disagreement, Approval/Disapproval,



UCLA Chinese Video Clips Project

This project, sponsored by a UCLA Instructional Improvement Program grant, explores ways to use media clips on the CCLE platform to teach undergrad courses in Chinese language, linguistics, and culture.

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Undergraduate Research Assistants: Jessica Cui, Agnes Liu, Amanda Sunyoto, Nicole Wetzel

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The following fields represent important information for recording keeping and future use of the video clip collection. Please fill in as much information as possible after each video clips is cut and transcribed.

Conclusions

- MDA based on MM corpora affords a wide range of information for us to understand human communication, of which language structure is but one part of the ecology.
- MM corpora can complement text corpora in integrated ways
- MM corpora and MDA can be exploited for both research & teaching