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Conversational Repair: Where Modality and Morality Converge

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This study investigates how modal meanings such as volition, obligation, possibility or permission in Chinese are constructed through conversational repair organization. Over 40 instances of repair which involve the above mentioned lexical modal expressions are examined in terms of the type of repair, the agency of repair initiation and implementation, as well as the interactional context. While most acquisition studies on children's use of modal language have largely focused on the timing and frequency of isolated instances of usage, this study argues that it is not context-free frequency but rather the understanding of the interactional contingencies and of the range of modal meanings that indexes the learner's competence. It also suggests that modality may not be encoded in modal verbs but can be instead expressed through the sequential organization of turn taking.

1. Toward an interactional account of modality

Modality is commonly defined as "the speaker's opinion or attitude towards the proposition that the sentence expresses or the situation that the proposition describes" (Lyons 1977: 452, Willet 1988:52) or the source of information for a proposition (Bybee 1985). Chafe (1986) calls the former the "broad sense" of evidentiality and the latter the "narrow sense". Other scholars such as Givon (1982: 25) consider "evidentiary strength, evidentiary source and evidentiary justification or knowledge" as integrated aspects of the same phenomenon. Literature indicates that children's exposure to and development of modality has important implications for learning in general (Bartsch & Wellman 1995, Dittmar & Reich 1993, Guo 1994, Halliday 1993).

Specifically, Lyons (1977) further describes *epistemic modality* as relating to matters of knowledge or belief (p. 793), as in 那么阴的天, 等一会儿肯定下雨(*It is such a cloudy day. It must rain in a little while*), and *deontic modality* as relating to the necessity or possibility of acts performed by morally responsible agents (p. 823), as in 小朋友应该互相谦让(*Little friends should yield to each other*). Other linguists (Coates 1983; Leech 1971/1987; Palmer 1990) presented alterative, more fine-grained categorizations of modal meanings. However, all acknowledge the broad epistemic and deonic types of meaning. Epistemic modality provides children with a resource for developing the capacity to infer, predict, generalize and hypothesize; deontic modality provides a resource for children's exploration and understanding of social obligations, responsibilities, constraints, and cultural and moral values (Noveck & Sera 1996, Stephany 1986, Sweetser 1982).

As Fox (2001) points out, many studies from formal and functional linguistics have primarily looked at modality as a grammaticalized category expressed in verbal morphology. Attempts to understand modality as a resource that constructs interlocutors as social and moral beings have been relatively few (but see He & Tsoneva 1996; Schieffelin 1996). The study presented in this paper follows the interdisciplinary work spearheaded by Ochs, Schegloff and Thompson (1996). It draws upon three interrelated research traditions: functional linguistics that is concerned with the role of language in communication and cognition, linguistic anthropology that focuses on cultural underpinnings of language, and conversation analysis that examines the interactional matrix of language structure and use. Specifically, it focuses on how participants' epistemic and deontic stances emerge, unfold, shift through repair organization (Schegloff et al. 1977; Schegloff 1992, 1996) in naturally occurring interaction. It investigates how modal meanings such as volition (肯, 愿意, 要, 想), obligation (最好, 应该, (非)得, 必须), possibility ((可)能, 会, 也许, 大概, 一定/肯定) or permission (可以, 能) in Chinese are constructed through self-initiated same turn repair, self-initiated repair in transition-relevant-space, self-initiated third turn repair, self-initiated third-position repair, other-initiated self-completed next turn repair as well as otherinitiated other-completed repair.

2. Data and methods

Data are drawn from 30 hours of audio- and video- recorded class meetings involving 4 teachers and 35 children (age 4.5-9) who are learning Chinese as their heritage language. Over 40 instances of repair which involve lexical modal expressions are identified, transcribed according to the conventions used in Conversation Analysis (Atkinson & Heritage 1984: ix-xvi), and examined in terms of the type of repair, the agency of repair initiation and implementation, as well as the instructional context in which the repair is embedded and to which the repair contributes.

The following modal expressions were searched in the database:

Volition	肯 ken (be willing to), 愿意 yuanyi (be willing to, 要 yao (want), 想 xiang (want, desire)
Obligation	最好 zuihao (had better), 应该 yinggai (should, ought to), (非)得 dei (must, have to), 必须 bixu (must)
	(可)能 keneng (possible), 会 hui (probable), 也许 yexu (maybe), 大概 dagai (maybe, perhaps), 一定/肯定 yiding/kending (surely)
Permission	可以 keyi (may, can), 能 neng (can)

(Adapted from Li and Thompson 1981: 182-183; Norman 1988: 124f, 165f)

When trouble such as mishearing, misunderstanding, or misspeaking in conversation occurs, it is noticed and then corrected, either by the party whose turn contains the source of

trouble or by some other party. This sequence of trouble + initiation-of-correction + correction is known as a *repair trajectory*. Repair occurs when one party corrects his or her own talk or that of another party and can be accomplished in a number of ways (Schegloff et al. 1977). Of particular relevance to our data are the following:

- Self-initiated same turn repair refers to the situation when the current speaker initiates and completes the repair within his/her current turn of talk and before coming to a possible completion of a complete grammatical, lexical, intonational and pragmatic unit, also known as the turn-constructional-unit (TCU) (Ford and Thompson 1996). It is the earliest position in which repair can be undertaken. The repair is signaled by a number of speech perturbations such as cut-offs, hesitation markers, pauses, and restarts. Schegloff et al. (1977) show that this is the most frequent and the most preferred type of repair. An example of this type of repair would be as follows:
 - (1) A: 我妈妈说我们今天去-今天要去 rehearsal
- Self-initiated repair in transition-relevant-space. If the speaker of the trouble source does not perform repair during the turn in progress, he/she can repair the utterance in the transition-relevant-place, i.e., at the end of a TCU, before another speaker takes a turn. Here is an example:
 - (2) A: 老师 can you help me- 可以-可以帮忙(.)帮我吗?
- Self-initiated third turn repair. In this type of repair (Schegloff 1996), a speaker produces a turn and the hearer responds to it without producing any sign of breakdown in intersubjectivity. After the response by the hearer, the speaker uses the next turn to revise his/her previous turn, as in:
 - (3) A: 上次他拿了两个 sti[cker B: [I got more yay:: A: No 上次他拿了三个(.)三个
- Self-initiated third-position repair. While in the third turn repair the hearer provides an appropriate response which does not prompt repair of the speaker's first turn, in third position repair (Schegloff 1992) it is precisely the hearer's response that engenders the repair. In other words, the hearer's response enables the speaker to notice a problematic understanding of his/her prior turn. The following is a case in point:
 - (4) A: 快点快点啊, 草字头, 草字头, 一撇一横一点 B: 怎么不像? A: 啊? 嗷, 竹字头, 竹字头, 老师说错了
- Other-initiated self-completed next turn repair is when repair is initiated by a participant other than the speaker of the trouble-source. When this happens, the repair initiation usually comes in the turn immediately subsequent to the trouble-source turn (known as next-turn-repair-initiation, or NTRI). See below for an example:

- (5) A: 在那个书里那个英雄= B:=那<u>个</u>书? A: 那本书里
- Other-initiated other-completed repair occurs when a participant other than the speaker of the trouble-source both initiates and completes the repair. In adult conversation, it is usually preceded by discourse markers such as well or uhm and often takes the form of a candidate understanding with question intonation. This type of repair theoretically can occur in any turn or any position, as in (6).
 - (6) A: 下面该 su-san 了

B: Susie

Of the types of repair outlined above, the most preferred is self-initiated and self-completed in the same turn as the trouble-source. Other initiation and other completion of repair can index a stance of disaffiliation with the interlocutor; and the farther the distance between the trouble source and the completion of the repair, the greater and the longer the miscommunication.

Most existing research on modality has focused on lexical, syntactic, prosodic realizations of modal meanings. And most has used subjective introspection; machine readable corpora of natural language as common research methods. The presents study differs in that it focuses on how participants themselves ascertain and negotiate modal meanings through repair organization.

3. Data analysis

This section examines how through conversational structural mechanisms the participants navigate and negotiate various modal meanings: the varying degrees of volition, the indeterminacy between obligation and option, and the ambiguity between possibility and permissibility.

3.1. Varying degrees of volition

Data segment (7) presents a case in which a child desires to drink water during class. We can see that in order to accomplish his objective, the child resorts to a range of modal expressions both within the same turn and across speaking turns in response to the teacher's reactions.

(7)"我想喝水"

001 洋洋: 我想喝水。

Yangyang: I want to drink water.

002 老师: 等一下,马上就-一会儿就下课(.)下了课再喝。

Teacher: Wait a little. Soon- Class will be over in a minute (.) Drink when class is over.

003 洋洋: 我要- 我特别渴, I'm [on FIre!

Yangyang: I want- I'm terribly thirsty. I'm [on FIre!

004 老师: [啊呦: <u>这么</u>严重啊= Teacher: Wow: it's THAt bad=

005 洋洋: =no- I'm not on fire I'm DY[ING Yangyang:=no- I'm not on fire I'm DY[ING

006 老师: [那你快去快回。

Teacher: Then you go fast and return fast.

In this case, the upgrading of the degree of volition is prompted by the teacher's rejection (002) and accomplished through (i) self repair (003), (ii) the change of modal form from modal adjunct to lexis (003, 要=> 特别=> on fire), (iii) code switch (003). Further upgrading is accomplished through a 3^{rd} turn repair (005), resulting in the shift of Teacher's stance from rejection (002) to acceptance (006).

3.2. Obligation vs. option

Data segment (8) involves a case where self initiated same turn repair and other initiated third position repair serve to scaffold the process to ascertain moral obligation versus practical option.

(8)"孔融让梨"

001 老师: "孔融让梨"说的是小朋友应该互(.)相(.)谦(.)让。

Teacher: The story of "Kong Rong Yields Pears" tells us that little friends should

yield (.) to (.) each (.) other.

002 要是你们在家跟弟弟妹妹玩,

If you are playing with your younger brothers and sisters at home,

You (.) fight for toys (.) Is that right or not?

004 不好啊

Not good ok

005 (.2)

006 老师: 要把- 应该把玩具让::给弟弟妹妹

Teacher: Should- Ought to yie::ld the toys to younger brothers and sisters

007 Jason: 为什么要让给他? 我们 share 就可以了。

Jason: Why yield to him? We can share.

008 老师: Share (.) 嗷:: share 是不错

Teacher: Share (.) uh:: share is not bad

009 (.2)

010 老师: 可是能让就更好

Teacher: But being able to YIELD will be EVEN better.

Oli Jason: Oh:: no::: Do I really have to? Oh:: no::: Do I really have to? The oli and th

Teacher: I'm not saying you have to- not saying that you MUST yield

能让最:好啊

Being able to yield is THE BEST ok

Here, the teacher initially framing "yielding" as obligation (001-004). The modal verb 要 at the beginning of line 006 (want or should) is ambiguous (either volition or obligation); however, a same turn self repair (006) clarifies and enhances the sense of "obligation" (要把- 应该把). After the child (007) sets up contrasts between obligation (要/should) and option (可以/can), the teacher presents a better "option" (010), which is turn taken by Student to mean "obligation" (011). A consequent/subsequent 3rd position repair (012) rejects the "obligation" interpretation and reinforces the "option" interpretation. The segment shows that as the teacher modifies "obligation" with "option", after Student introduces "option" (007) and challenges "obligation" (011), modal meanings evolve through moment-by-moment interaction.

Similarly, in (9), the indeterminacy between requirement/obligation and practical option is teased out through third position self repair.

(9)"这是英文字典"

001 老师: 这是英文字典, 拿错了, 这不能用.

Teacher: This is English dictionary. You took the wrong one. This cannot be used.

002 学生: Chinese words (.2) here! 可以用!

Student: It can be used!

003 老师: 老师要你们用中文字典. 应该带中文字典. 下次-下次注意.

Teacher: I want you to use Chinese dictionary. You should bring Chinese dictionary. Next time-next time pay attention.

When the teacher first points out the dictionary cannot used (001), the student takes the teacher to mean that the dictionary contains only English and therefore cannot be used for Chinese purposes (002). In the third position, the teacher repairs her initial statement by specifying that it is a requirement to bring a Chinese dictionary (and not a dictionary that contains Chinese words), not a practical choice.

3.3. Possibility vs. permissibility

Data segment (10) shows how modal meanings are shaped and jointly constructed through next turn repair initiation (NTRI) and other repair.

(10)"谁能读?"

001 老师: 好 (.) 淑雨你来

Teacher: Good (.) Shuyu you try it

002 ((pause))

003 老师: 你能读就大声读

Teacher: If you can read, read loudly

别的同学好好听 004 Other students listen well "它又-又-又什么前走…" 005 淑雨: "它又-又-又-something 前走…" Shuyu: 006 小倩: "住::[住前走" Xiaoqian: "<u>住</u>:: [<u>住</u>前走" ["往"[那是"往" 007 波波: Bobo: ["往"[That's "往" 008 S?: [No:: wrong::: **S**?: [No:: wrong::: 009 Ss: [((inaudible)) 010 老师: 安静! 大家安静! Teacher: Quiet! Everyone quiet! 011 有人在读别人就不能读, OK? 012 When someone is reading others can't read, OK? 013 (.2)淑雨再想想 014 Shuyu think again 015 淑雨: 我没学过 I didn't learn it. Shuyu: 016 (.2)。我不会。 017 淑雨: I can't 018 老师: 没学过还是学了不会呀? 谁能读? Teacher: Didn't learn or learned but can't? Who can read? 019 好. Justin= Good, Justin= =Me [me! 老师, 我! 我能读! 020 波波: =Me [me! Teacher, me! I can read! Bobo: 021 Justin: ["它又((inaudible))" ["它又((inaudible))" Justin: 022 老师: 安静! Teacher: Quiet! 023 波波: 我能! 我记得那个字! Bobo: I can! I remember that word! 024 老师: 等 Justin 读完 Teacher: Wait until Justin finishes reading 025 °咱们不能影响别人(.)知道吧 °? We can't disturb others (.) Understand?

026 (.2)

027 老师: 老师知道你能读

Teacher: Teacher knows you can read

028 (.2)

029 老师: 但是你等- 你得- (.2)

Teacher: But you wait- you need to- (.2)

030 波波: OK, <u>现在</u>不能= Bobo: OK, I can't NOW= 031 老师: =对了, 波波真懂道理!

Teacher: =Right, Bobo is really sensible

This case concerns the dual function of 能/can – possibility/ability in 003 and permissibility in 012 (cf. He & Tsoneva 1998). The NTRI (018) (能会) renders a sequential, local interpretation of "能/can" as ability. After seeing the contrast between his "possibility/ability" interpretation (020, 023) and Teacher's "permission" interpretation (025), Bobo finally displays understanding of "能/can" in its permissibility sense through other repair (030). This segment shows how ambiguity is cleared but duality is preserved through interaction and how children/students come to understand the full range of modal meanings through interaction.

能(can) shows up again in data segment (11) which illustrates NTRI (next turn repair initiation) as a resource for the modulation and negotiation of epistemic possibility. (11) "肯定不是'兄"

001 学生甲: 小小礼物, 为我们带来了欢乐和兄福 ((reads))

Student A: small small gift brings us joy and "xiong fu"

002 老师: "兄福"? 这是什么意思呀? 可能吗?

Teacher: "xiong fu"? what does it mean? Is it possible?

003 学生乙: 肯定不是"兄"

Student B: I'm sure it's not "xiong"

004 老师: 对了, 不能是"兄", 那是什么? 我们平常说什么? 说什么福?

Teacher: Right. It cannot be "xiong". Then what is it? What do we normally say? We say what "fu"?

005 学生甲: 福倒了=

Student A: "fu dao le"

006 学生乙: =那个那个门上的东西

Student B: The thing on the door [[referring to the inverted "happiness" character]] 007 (.2)

008 老师: 想不出来啊? 猜猜看, 会猜你就(.)学的字就(.)就多了.

Teacher: You can't figure it out? Make a guess. If you can guess, you will learn more words.

009 (.4)010老师: 这是一种祝愿, 所以念"祝[福". Teacher: This is a wish ("zhu yuan"), so it should read "zhu fu" 011 学生乙: [祝福(.) I knew it! "zhu fu" Student B: A turn-by-turn analysis of (11) follows: Turn 1 (001): trouble source (兄福) Turn 2 (002) (NTRI): 可能-interrogative/Initiation1 Turn 3 (003) (towards a repair): 肯定-negation/Response1 Turn 4 (004): 能-negation/Evaluation1 Initiation2 Turn 5 (005): Response2 Turn 6 (006): Response 2 (collaborative with Turn 5) Turn 7 (008): Evaluation 2 / Initiation 3 ((no uptake)) Turn 8 (010): repair of Turn 1 Turn 9 (011): collaborative completion of Turn 8

This process shows that the NTRI in line 002 launched an interactive speculation and exploration of possible readings of the word 祝, a process that involves three participants—two students and the teacher. It triggered a strong collaborative negation by Student B (肯定不, 003) and the teacher (不能, 004) of the reading presented by Student A in Turn 1. The interaction subsequently moved on to a series of initiation-response-evaluation sequences typical of teacher-centered pedagogical discourse, without further use of any modal verbs. When finally the participants come to a shared realization of the correct reading of the word, the utterances exhibit a degree of certainty (010 and 011) that requires no modals.

4. Conclusions and implications

This study has implications in several areas including language acquisition and language socialization, as well as the inherent properties of modality. While most acquisition studies on children's use of modal language have largely focused on the timing and frequency of isolated instances of usage, this study argues that it is not context-free frequency but rather the understanding of the interactional contingencies that indexes the learner's competence. It indicates that instead of a YES/NO question concerning whether a child has acquired a single, particular modal meaning, we should perhaps be asking whether a child has been socialized into a *range* of modal meanings and whether the child is able to negotiate and modulate modal meanings.

This study further suggests that modality may not be encoded in modal verbs but can be instead expressed through the sequential organization of turn taking. Take for example the interaction between a teacher and a parent below:

(12)"陈浩明天有个竞赛"

001 家长: 陈浩明天有个竞赛.

Chen Hao has a competition tomorrow

002 老师: 那他就下次吧

Then he can do it next time (("it" refers to an activity held in Chinese school))

003 家长: 其实没事, 他比赛 11 点就完了, 然后我把他直接送来. 您看呢?

Actually it is okay. He finishes the competition by 11. Then I'll drop him off

here. What do you think?

004 老师: 远不远哪? 那你辛苦了.

Is it very far or not? Then it'll be a lot of work for you.

In this interaction, the two adult participants are clearly discussing and negotiating possibilities, obligations and options. And yet no modal verb is deployed at all. It is possible that the more linguistically and culturally advanced the student, the more likely that s/he will resort to sequential organization of talk (and thus reduce the amount of surface lexical modal forms) in projecting modality.

The above, in turn, raises the question as to what constitute evidence for language acquisition: we could be misguided if we simply use frequency of output as basis for our judgment. In other words, learners may very well have acquired the meanings of modals and yet not exhibit their competence in the form of the use of explicit modal markers.

This study also has implications for understanding modal meanings as inherently intersubjective and dynamic. It has shown that the clarification of modal meanings requires interaction between participants, and is not merely a matter of introspective grammaticality judgment held by any one single speaker. And it is conversational structural mechanisms such as repair organization that make the collaborative clarification of meaning possible.

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