

Power Relations in Older Adults' Cognitive Interaction in Clinical Setting: A Multimodal Pragmatic Perspective

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Abstract

This study explored the construction of power relations in the cognitive assessment of older adults within the Chinese clinical context. Data is derived from audio and video recordings that nine older adults produced in the cognitive assessment of the Chinese version of the Montreal Cognitive Assessment-Basic (MoCA-B), which were then annotated and analyzed from a multimodal pragmatic perspective. The study reveals that examiners and older adults employed various speech acts to achieve distinct communicative goals, with power relations between them being reflected through these speech acts. Examiners tend to claim high power, utilizing discourse strategies such as request, interruption, evaluation, rhetorical questions, and directive speech acts. In contrast, older adults assert high power through directive speech acts, rhetorical questions, and interruptions. Both parties also exhibit low power by using confirming questions and explanations. Additionally, gestures, smiles, prosody features, and other non-verbal communicative resources are synergistically employed to exercise power. The interactive mechanism of constructing power relations reveals that age affects older adults' power relations construction even in a professional setting of the Chinese context. The negotiation between the advanced age of older adults and the expertise of examiners jointly shapes power relations in their interactions.

Keywords: power relations, cognitive assessment, discourse strategies, aging

1. Introduction

Power relations are non-negligible and pervasive elements within institutions (Mayr, 2008). Investigating the mechanisms involved in constructing power relations can unveil, to a large extent, the nature of institutional interaction described as characteristically asymmetrical (Drew & Heritage, 1992). However, despite extensive studies on power relations in various institutional settings such as doctor-patient interactions, trials in court, psychological

counseling, and classroom conversation, which often overlook participants' age, few have focused on interactions in cognitive assessment, which is a crucial institutional discourse in the context of population aging, and research on doctor-elderly patients is scarce (Lu et al., 2022). Cognitive assessment extends beyond the hospital setting, and elderly patients are not informed of the assessment results. Furthermore, both age and the constrained assessment time contribute to subtle differences in the interaction between examiners and elderly patients compared to doctor-patient communication. Power relations between older adults and examiners can influence the progress, accuracy, and outcomes of the assessment. In this sense, the academic and clinical significance of power relations between older adults and examiners in the context of cognitive assessment is worth noticing.

Although it is widely accepted that greater age is a non-negotiable high-power status marker (West, 1984), older adults usually feel humiliated and powerless during healthcare encounters because of age-related issues (such as cognitive decline) (Roberts et al., 2018). Age-related psychological problems and aging itself are also professional hazards for medical workers and thus affect treatment outcomes (Korc-Grodzicki et al., 2020). Therefore, age is critical in doctor-elderly patient communication and the successful delivery of healthcare services. On the other hand, in the Chinese context, older adults have greater power because of the moral concept of respecting older people in traditional Chinese culture (Ma, 2022). Age is an especially significant factor when examining power relations between the examiner and the elderly patient during cognitive assessment in a Chinese clinical context.

Furthermore, previous studies of power relations only analyzed verbal channels, while non-verbal communicative resources were ignored. In fact, the modes are cultural resources that are socially shaped and made accessible for interaction in various contexts (Kress, 2009). The delivery of meaning requires the integration of both verbal signs and other semiotic modes. For example, Careless (2018) found that non-verbal modalities, such as facial expressions and gestures, are essential to information exchange in doctor-patient interactions and can reveal doctors' and patients' emotional states and attitudes. So, "both verbal and non-verbal channels should be considered when a speaker's pragmatic interaction is being studied" (Huang, 2022). On the other hand, existing studies on power in pragmatics or discourse behavior mainly involve suggesting discourse behavior (Ren, 2015) and evidentiality in court discourse (Deng, 2017). In contrast, there is little involvement in requesting, directive, or evaluation behavior.

This paper intends to use video-recorded interaction in cognitive assessment as the corpus source to conduct a detailed analysis of power relations from the perspective of multimodal pragmatics. The study predominantly examines the power relation types and construction strategies of power, and further reveals the mechanism of constructing the power of examiner-elderly patients in cognitive assessment. Moreover, this study also examines the effects of age and expertise on power relations construction in cognitive assessment.

2. Power Relations in Clinical Settings

The definition of power is diverse. Burbules (1986) asserts that power tends to be dominant, leading to anticipated conflicts of interest among participants. Chiang (2009)

proposed the concept of “resource power,” viewing power as a form of resource. Harris (2003) notes that power is commonly understood as the ability to exert control over others. These definitions conceive power as an independent entity detached from the realm of participants and situations. This study conceptualizes power as a negotiated process, which can be claimed over the emerging discourse (Ainsworth-Vaughn, 1995).

Compared with other spontaneous and institutional discourses, the study of power relations in doctor-patient interactions has gained increasing prominence. Yang (2019) argues that the asymmetry in the relationship between doctors and patients stems from the imbalanced knowledge and expertise of the doctor-patient relationship in clinical contexts. In comparison, some recent research examines power relations from patients' perspectives, concluding that patients are only occasionally hesitant to assert power (Ainsworth-Vaughn, 1998). The physician's traditional role undergoes significant transformation in diverse contexts (Zhang, 2021). Furthermore, a recent study stated that the patient-general practitioner relationship can be viewed as reciprocally dependent (Gimenez et al., 2023). These findings prompt a nuanced examination of the role and power dynamics in the examiner-elderly patient interaction during cognitive assessment in the Chinese context, where individuals exhibit a more interdependent self-construal, particularly in doctor-patient interactions (Min et al., 1999).

The role of language in power relations is depicted as the product of the relationship between linguistic markets and acquired conventions. Abundant linguistic resources serve as elements in the distribution of power (Keating, 2009). Consequently, discourse strategies for constructing power constitute essential research content in studying power relations. Deploying conversation analysis and discourse analysis, researchers have identified diverse discourse strategies for constructing power in the clinical context. Discussions on power construction strategies primarily focus on language forms, such as address forms, personal pronouns, and modal words (R. Brown & Gilman, 1960). Some scholars have elucidated power relations between doctors and patients by examining the asymmetry in doctor-patient question-and-answer sessions (Ibrahim, 2001). Ainsworth-Vaughn (1998) shed light on power asymmetry regarding topic control. Moreover, some studies have delved into conversational structures, such as interruption, pause, and insertion, which are widely explored to examine power relations in doctor-patient communication (Fisher, 1983). The discourse strategies of power construction vary depending on specific communication situations.

However, there is a need for more systematic research on the construction of power in cognitive assessment both domestically and internationally. Empirical research on the dynamic construction of power and exploration of the mechanism of constructing power within examiner-elderly patient interaction in cognitive assessment is even rarer. Moreover, examiner-elderly patient interaction possesses characteristics regarding the participant's age and the examiner's expertise. The literature suggests that evaluating such factors as cognitive decline and sensory deficits caused by aging is essential in geriatric patient medical visits (Amalraj et al., 2009). Age-related social and psychological problems will make the doctor-patient interaction even more arduous (Waard et al., 2018). Therefore, its power dynamics differ from those in other institutional interactions. This study could provide a deep lens for

looking at power relations constructed by the examiner and the older adult in cognitive assessment.

Additionally, some research findings indicate that physicians can use gestures or facial expressions to signal a desire to take a turn in conversation. So, non-verbal signals are non-negligible communicative resources in power relation studies (Ainsworth-Vaughn, 1998). For example, Preisig et al. (2018) found that co-speech gestures that convey communicative meaning are ubiquitous in face-to-face encounters. Patients with aphasia are more likely to draw attention to co-speech gestures than healthy people, which suggests that patients could benefit from multimodal communicative resources (Preisig et al., 2018). Since the cognitive assessment must be inevitably conducted symmetrically, the examiners and the older adults may perform multimodal behavior, so multimodal critical discourse analysis (MCDA) should be applied as in Er's (2020) investigation.

3. Analytical Framework

Verschueren (2000) delineates the multifarious characteristics of choice-making in linguistic communication: variability, negotiability, and adaptability. Power, as a communicative resource, shares these characteristics. The diversity of power relationship types enables communication participants to make choices. In this study, drawing on linguistic adaptation theory, we adopt the definition that power relations entail dynamic relationships between communicators, constructed through multimodal pragmatic resources driven by the communicative network's pragmatic needs.

Power is constructed partially through actions that control the emerging discourse: participants' successful claims of speaker rights (Ainsworth-Vaughn, 1998). Subsequently, power analysis necessitates a micro-analysis of language (Nair-Brodeur, 1995). Individuals make linguistic choices to achieve communicative intention by adapting to the context. Simultaneously, power can be viewed as both a contextual factor and an element of communicative intention.

According to linguistic adaptation theory, language use encompasses not only the adaptation and selection of language at all levels of language structure but should also extend to the adaptation and selection of other nonlinguistic modes. This approach allows for a comprehensive and detailed examination of all modes involved in communication (Chen & Qian, 2011). Therefore, it is necessary to introduce a multimodal pragmatic analysis for power relations. Power in communication can also be constructed or adjusted by selecting discourse strategies.

Power asymmetry is a primary characteristic of institutional interactions. Power can be classified into higher and lower power (Spencer-Oatey, 1996). This paper investigates the various types of power relations between older adults and examiners. Power relations are actualized through discourses. This paper primarily focuses on the discourse content and patterns deployed to construct power relations.

Based on linguistic adaptation theory, power can be regarded as communicative resources for achieving interactive goals, and multiple expression devices (including verbal and non-verbal acts) interact dynamically and synergistically to construct power. Thus,

synthesizing the analytical framework of institutional power construction and multimodal pragmatic analysis framework (Ren, 2015), this paper proposes a multimodal pragmatic analytical framework to analyze the interaction between older adults and examiners in cognitive assessment.

4. Research Design

This article explores power relations between examiners and elderly patients in the cognitive assessment within the Chinese clinical context. Discourse strategies and pragmatic mechanisms of constructing power are the predominant focus when analyzing data.

4.1 Research Questions

Based on observations on the interactive communication phenomenon during cognitive assessment, this study posits that examiners and older adults construct distinct power relations by implementing diverse pragmatic behavior during an interaction. Therefore, the study aims to answer the following questions to examine the construction characteristics of the power relations in examiner-patient interaction during cognitive assessment:

- 1) What kinds of construction strategies do older adults and examiners employ to construct power relations in cognitive assessment?
- 2) What is the overall mechanism for constructing power relations in cognitive assessment?

4.2 Data Collection and Processing

The research data were generated by nine Chinese older adults undergoing the cognitive assessment using the Chinese version of the Montreal Cognitive Assessment-Basic (MoCA-B). On average, the nine older adults were 75 years old, consisting of 7 females and 2 males. All examiners went through professional examinations and were well-qualified to conduct cognitive assessments. The examiners consist of 3 females and 1 male aged 26 years old on average, who are actively pursuing their master's or doctoral degrees in gerontolinguistics. For data segmentation and annotation, this study refers to Huang's (2022) working scheme for multimodal pragmatic analysis, following the idea that interpersonal communication involves both internal language structures and multimodal interaction. Prosodic features, gaze, smile, and other non-verbal acts were selected as annotation and analysis tiers in Elan.

5. Results

Corpus analysis indicates that the examiner mainly constructs high power in cognitive assessment interaction. Conversely, the elderly patient claims low power while occasionally exerting high power.

5.1 Power Relations Constructed by Examiners and Construction Strategies

Within this institutional context, the examiners hold the authority to make requests, interruptions, evaluations, directives, and inquiries. These pragmatic behavior serve as avenues through which the examiner exercises their power.

5.1.1 Request

Excerpt 1

1E (Examiner): (手指图片; 头部靠近老年人; 眼睛看向老年人) 这里有一张图, 里面有很多重叠在一起的物品, 请您把它们都找出来。如果您不知道它们的名字, 可以指出它们的轮廓(手势), 或告诉我它们的功能。

(pointing to picture; head close to the older adult; gazing at the older adult)

Here is a picture with many overlapping objects. Please identify them.

If you [Nin] do not know their names, you may point out their contours (gesturing) or tell me their functions.

2P (Patient): (手指图片) 这不是香蕉吗? 这个是香蕉。

(pointing to the picture) Isn't this a banana? This is a banana.

(1) Types of Power

In Excerpt 1, the examiner guides the patient to finish the visual perception task, asserting high power through the request speech act. In this context, the examiner is authorized to inquire, evaluate, and instruct older adults, thus establishing institutional high power through these pragmatic behavior. Participants' professional identity and power relationship are evident not only in the utilized speech acts, but also in the specific strategies and language forms used to achieve these speech acts (Holmes et al., 1999).

(2) Discourse Strategies

The request speech act is the predominant and direct way the examiner uses to exert power in cognitive assessment. In Excerpt 1, the examiner addresses the older individual as “您” [Nin] (the honorific form of “you”), which is an internal modifier embedded into the head act of the request to bid for cooperation behavior (Aizatul & Isma, 2023, pp. 981-999). The speaker tends to adopt the more formal requesting strategy when having power over the hearer (Li, 2008). The examiner used these words to request the patient finish the visual perception task, fulfilling her right and responsibility and exercising her higher power. Moreover, “if” (如果) and “can”(可以) in the clause are also regarded as an internal syntactical modification to minimize the force of request (Ninomiya & Shadayeva, 2020, pp. 648-667), mitigating the power asymmetry and reflecting the examiner's superior power simultaneously.

Non-verbal acts, as a multimodal resource, tend to co-occur with speech in face-to-face communication (L. Brown & Prieto, 2017). The examiner also employs non-verbal expressions in cognitive assessment. In Excerpt 1, the examiner points to the picture, leans, and gazes at the older adult while informing him that he can depict the profile of the recognized object, along with the iconic gesture, further emphasizing that the speaker does not have to speak out the object's name. Body posture and gesture are auxiliary expression devices the examiner uses to carry out her right and obligation, which help her exercise her power. According to relevance theory, communication is the explicitly expressional process of the sender of information and the inferential process of the communicative object (He & Ran, 2001). The

older adult combines the information provided by the discourse with relevant contextual information, namely, speech with gestures, inferring and decoding the information under the guidance of the principle of relevance. Ultimately, he understands the examiner's communicative intention.

(3) Communicative Goals

In Excerpt 1, stressed words are underlined. The words “overlapping”(重叠) and “function”(功能) are stressed by the examiner to attract the attention of older adults. It is because the older adult, aged 89 years old, needs more supportive devices to understand the task requirement. Therefore, stressed words are used to perform the examiner's obligation and construct her high power simultaneously.

(4) Influential Element

The role is closely related to equality and power in sociology. Role refers to the pattern of behavior set by society to represent social status or the sum of norms required by a status. The examiner's role leads to the construction of high power over the patient in this encounter. In addition, power can be expressed through age in Chinese culture (Lee-Wong, 2000). In this encounter, the older adult is distinctly senior to the young examiner, prompting the use of a more indirect requesting speech act to correspondingly acknowledge the older adult's slightly higher power because of their higher age. At the same time, an indirect and polite requesting speech act is more supportive and constructive than a face-threatening role, as P. Brown & Levinson (1987) claimed.

In summary, the examiner employs a requesting speech act and mobilizes other multimodal resources to construct high power. Various modifications of request and abundant multimodalities are utilized due to the greater age of the older adult.

5.1.2 Interruption

(1) Types of Power

Interrupting the older adult establishes the institutional high power of the examiner. Thus, in this instance, the examiner asserts his high power.

Excerpt 2

1E: 也可以用骰子的一点、两点、三点来表示顺序, 请您按照从数字……

You may also show the order using one, two, or three dots on the dice.

Please follow the sequence from the numbers...

2P: (打断) 就点就数, 从标志(手势)。一、两、三。

(interruption) Just click and count from the sign (gesturing). One, two, three.

3E: (打断) 阿姨, 您听我讲, 听我讲完啊。

(interruption) Aunt, listen to me and let me finish explaining.

4P: 喔……

Oh...

(2) Discourse Strategies

Interruption serves as a symbol and expression of status and power (Lyu, 2006). In Excerpt 2, the examiner interrupts the older adult, stating, “Aunt, listen to me and let me finish explaining,” denying her the opportunity to speak, thereby asserting the examiner’s institutional high power. Furthermore, the older adult also conducts interruption behavior jointly with gestures. The examiner interrupts the older adult’s interruption behavior, representing a power contest between them.

(3) Communicative Goals

To some extent, the conclusion aligns with Liao’s (2003) assertion that interruption in the middle of discourse reflects control and competition. The examiner fulfills his responsibility through interruption.

(4) Influential Element

The examiner gains control over the topic due to the time constraints in cognitive assessment. This case demonstrates that power is dynamic and contestable, and environmental constraints often contribute to power exercise (Paramasivam, 2007). On the other hand, greater age results in hearing loss and comprehension decrease, so the older patient eagerly confirms the examiner’s statement through interruption.

5.1.3 Evaluation

Excerpt 3

1E: 桔子和香蕉属于什么类别?

What category do a banana and an orange belong to?

2P: 什么类别? 水果呀。

What category? Fruit.

3E: 啊, 对。非常好。

OK, right. Excellent.

(1) Types of Power

The conversation in Excerpt 3 adheres to a traditional request-response-evaluation (RRE) structure. The examiner consistently provides an evaluation for each response from the older adult, firmly maintaining control over the entire interaction process, establishing high power.

(2) Discourse Strategies

Moreover, in line 3 the examiner adopts discourse markers “right” and “excellent” to evaluate the older adult’s performance, resembling Kovarsky’s pattern (1990). The examiner asserts her high power through evaluation. The finding indicates that power relation discourse markers are utilized to regulate the assessment of information and control the activity transition.

(3) Communicative Goals

The examiner evaluates the performance of the older patient in the abstract ability assessment, which manifests at the end of the assessment task.

(4) Influential Element

Limited assessment time necessitates that the examiner has to control the process and conduct the transition as soon as possible. So, every time the elderly patient finishes a task, the examiner evaluates it and promptly prepares to initiate the next assessment task.

5.1.4 Directive

Excerpt 4

- 1E: 现在是哪一年?
What's the current year?
- 2P: 23 年
23.
- 3E: 说完整!
Say it in its entirety!
- 4P: 2023 年.
The year of 2023.

(1) Types of Power

The examiner's directive act inquiring about the current year emphasizes their position and obligation, authorizing them to prompt the older adult. Consequently, the examiner asserts high power in this instance.

(2) Discourse Strategies

A directive act serves to identify one's authoritative role (Chiang, 2009). In this instance, the examiner strongly urges the older adult to state the exact year, with underlined stressed words and a tone connoting control. Both the speech content and the prosodic feature contribute to constructing the examiner's high power.

(3) Communicative Goals

The examiner employs a directive speech act to ensure accurate responses from the older patient. The primary communicative goal in cognitive assessment is to evaluate the correctness of answers and assign scores. Since the older adult's response was inaccurate, the examiner directed them to provide the complete answer.

(4) Influential Element

Authoritative directive affords the addressee little opportunity to play with reciprocal interactions (Yongbing & Huaqing, 2009). In this scenario, the examiner's role grants her the authority to guide the older patient, aligning with the characteristics of institutional discourse.

5.1.5 Rhetorical Question

Excerpt 5

1E: 那您这边耳朵, 我给你这边耳朵讲。好吧? (头伸向被试左耳)

Let me speak to you in this ear of yours. Alright? (head tilting towards the subject's left ear)

2P: (转过左耳)

(turning towards the left ear)

3E: 好, 我把这些词……

Alright, I'm going to explain these words...

4P: (侧过身体, 转过头)

(leaning away and turning around)

5E: (手指左耳) 您不是这个耳朵带耳机了嘛?

(pointing to the left ear) Aren't you wearing a hearing aid in this ear?

6P: (摸了摸右耳)

(touching the right ear)

7E: 我给您这个耳朵讲可以吧?

Let me speak to you in this ear, okay?

(1) Types of Power

In Excerpt 5, the examiner, faced with non-cooperation from the elderly patient, employs a rhetorical question, asserting high power over the patient.

(2) Discourse Strategies

Rhetorical questions, known to claim participants' authority (Nair-Brodeur, 1995), are used by the examiner in Line 5. The examiner leans towards the older adult's right ear to ensure clear instructions, but the patient turns her head. The examiner, pointing to the right ear, asks a rhetorical question, intensifying the power asymmetry. The change in body posture and gesture, along with the rhetorical question, reinforces the examiner's high power.

(3) Communicative Goals

The rhetorical question is employed to ascertain if the older patient's right ear is functioning correctly, serving the examiner's rights and obligations in the assessment process.

(4) Influential Element

Limited assessment time compels the examiner to assert high power, managing the conversation and overcoming obstacles promptly to proceed with the assessment within the constraints of time.

5.1.6 Explanation

(1) Types of Power

In Line 1 of Excerpt 5, the examiner adjusts her posture in response to the elderly

patient's hearing loss and says, "Let me speak to you in this ear, okay?" This indicates the examiner asserts her low power.

(2) Discourse Strategies

The examiner elucidates the reason for changing her posture and communicating with the elderly patient in a specific manner. The use of an explanation aligns with her low power in this scenario.

(3) Communicative Goals

The examiner strategically employs low power to facilitate the elderly patient in listening attentively and comprehending the instruction.

(4) Influential Element

The construction of low power by the examiner through an explanation is influenced by the cognitive decline and hearing loss associated with aging in the elderly patient.

5.2 Power Relations Constructed by Older Adults and Construction Strategies

This section reports the methods utilized by older adults to establish high power in terms of directive, rhetorical questions, and interruption. The elderly patient also acknowledges the expected role and socially conferred superordination with the examiner through pragmatic behavior such as confirming questions and explanations.

5.2.1 Confirming Question

Excerpt 6

1E: 附近有什么路?

Is there any road nearby?

2P: 这在上海路。哎呀，不对，密云路？（停顿 2 秒）对吧？是密云路吧？

This is on Shanghai Road. Oh, no, Miyun Road? (2s) Right? Is it Miyun Road?

3E: 啊，好。

Yes, okay.

4P: 对的。

Right.

(1) Types of Power

In Line 2 of Excerpt 6, the older adult utilizes a confirming question, intensifying the power asymmetry with the examiner and displaying the examiner's authority. The repetition of questions serves as a symbolic assertion of higher power.

(2) Discourse Strategies

Speakers employ various questions to claim power in asymmetrical dyads (Nair-Brodeur, 1995). A confirming question is used to confirm or disconfirm some aspects of the answer

(West, 1984). The patient uses the confirmatory question to give the doctor the choice to answer, which maintains the negative face of the doctor. This is a strategy to show respect for the doctor and achieve the purpose of obtaining information (Li, 2008). This type of question exerts much power over the emerging discourse by providing a restricted frame for the answer. The older adult repeats the confirming question three times in Line 2, reinforcing the modal meaning and the illocutionary force (Hou, 2022). Repetition is a tactic that the speaker uses to exercise power over the addressee (Chen & Qian, 2011). All in all, the older adult claims both high power and low power through repeated confirming questions.

(3) Communicative Goals

Repeating confirming questions serves to construct both low and high power for the older patient, while the examiner's high power remains relatively intact.

(4) Influential Element

The examiner's confirming questions and repetitions stem from aging and cognitive decline. Age emerges as a critical factor in power dynamics within this interaction.

5.2.2 Explanation

Excerpt 7

1E: 下面请你记住这几个词，待会儿我还会让您复述这几个词。

And then remember the words that you read, please. I will let you retell these words again after a while.

2P: (点头)

(nodding)

3P: 岁数大了，不行了(笑声)。

I'm too old to remember them (laughter).

(1) Types of Power

In Line 3, the older patient asserts his low power by stating, "I'm too old to remember them."

(2) Discourse Strategies

Refusal speech acts play a pivotal role in constructing and adjusting power dynamics. The older patient employs refusal speech acts to express a clear refusal attitude and purpose. Additionally, the use of auxiliary language strategically regulates the illocutionary force, aligning with communicative goals.

(3) Communicative Goals

The utilization of auxiliary language serves to diminish the power disparity between the parties, enhancing the acceptability of the refusal speech act and facilitating smoother communication.

(4) Influential Element

The evident impact of advanced age and cognitive degeneration leads to the older adult's acknowledgement of lower power compared to the examiner. This acknowledgement is reflected in the use of auxiliary language, such as "too old to remember them," accompanied by laughter, as part of the refusal speech act.

5.2.3 Directive

Excerpt 8

1E: 我不会给您找零钱, 您需要付给我 13 元整。

I won't give you any change, and you need to pay me exactly 13 yuan.

2P: 还没听清楚, 再讲一遍 (笑)。

I didn't hear you clearly yet. Tell me again (laughter) .

3E: 好, 再跟您读一遍。

OK, I'll read it to you again.

(1) Types of Power

In Excerpt 8, the older adult, facing hearing loss or lack of concentration, explicitly exercises power by directing the examiner to repeat the question, utilizing an imperative sentence followed by laughter.

(2) Discourse Strategies

Mullany (2007) believes that power is being exercised and contested constantly in an ongoing interaction; the older adult constructed his high-power position using the directive speech act because he has age superiority. On the other hand, Mills (2003) points out that a speaker with more power tends to employ less polite expression devices when conducting FTAs. In this institutional discourse, the older adult performed FTAs using the directive speech act. Power relations between the older adult and the younger examiner were delicately negotiated and reconstructed. As a result, the original power asymmetry was mitigated. Laughter can be used fundamentally for myriad social and communicative purposes (Pressman et al., 2017). For example, benign moral violations tend to elicit laughter (McGraw & Warren, 2010). In Excerpt 8, the older adult laughed loudly after directing the examiner to repeat his question, violating social norms. Consequently, the older adults laughed out loudly to soften that violation's negative influence and ease the intense atmosphere. Embarrassment manifests itself through his laughter.

(3) Communicative Goals

The elderly patient successfully achieves his communicative goal by directing the examiner to repeat the statement, ensuring better understanding.

(4) Influential Element

Age plays a significant role in establishing higher power for the older patient, aligning

with cultural norms. The laughter serves to soften the potential negative impact of the directive speech act and simultaneously expresses a sense of embarrassment.

5.2.4 Rhetorical Question

Excerpt 9

1E: 还有其他付款方式吗?

Are there any other ways you can pay?

2P: 你不找钱的呀?

Don't you give changes?

3E: 嗯。

Mm-hmm.

(1) Types of Power

In Line 2, the older adult's use of the rhetorical question can be regarded as a device that exerts social control over the examiner because he explicitly expresses his skeptical attitude to the examiner.

(2) Discourse Strategies

The use of “*ya*” (呀) in interrogative sentences is a common feature in Chinese for indirect speech acts, allowing the expression of non-interrogative discourse functions (Xu, 2018).

(3) Communicative Goals

The rhetorical question serves the communicative goal of expressing doubt and seeking clarification.

(4) Influential Element

The older patient's high-power exercise is attributed to the significantly higher age compared to the examiner.

5.2.5 Interruption

(1) Types of Power

Interruptions reflect power differences (West, 1983). High power is constructed by the

Excerpt 10

1 E: 下面我会给您读 5 个词, 然后读完这 5 个词之后呢, 您要注意……

And then, I will read you 5 words. After I read the 5 words, you should pay attention....

2 P: (打断) 5 个词? (伸左手示意 5 根手指、并看向评估员)

(interruption) Five words? (stretching out left hand, signaling five fingers and looking towards the assessor)

older adult in this instance.

(2) Discourse Strategies

This excerpt illustrates a typical example of interruption by the older adult in line 2, using multimodal resources such as gestures and gaze to convey the interruption.

(3) Communicative Goals

To some extent, the speaker's interruption indicates that he is thinking aloud (O'Reilly, 2008). Although an older adult is trying his best to make the question clear and then interrupts to finish the task correctly, it violates the assessment rules and may impact the accuracy of the result.

(4) Influential Element

The limited time for cognitive assessment creates a conflict of interest, leading to power competition through interruption.

5.3 The Interactive Mechanism of Constructing Power Relations

5.3.1 Motivation for Constructing Power Relations

It can be concluded that different power relation types and corresponding constructing strategies are chosen so as to achieve specific communicative goals (Verschueren, 2000).

The examiners construct their high power to fulfill their responsibilities and obligations with which the institution endures within limited assessment time. In a word, it is the role that the examiners play that determines whether they choose to claim high power using discourse strategies such as requesting, interruption, directives, rhetorical questions, and evaluation. In addition, the examiners "do power" to satisfy their communicative needs. For example, in order to improve assessment results and accuracy, cognitive assessment time is strictly limited, which further requires the examiners to control the progressivity of the assessment. The age gap is a defining characteristic of cognitive assessment discourse. In fact, research indicates that aging and cognitive decline make doctor-elderly patient interaction more difficult. In contrast, cognitive assessment encounters explicitly reveal older adults' cognitive state, which can, in turn, reflect their greater age. Older adults with greater age frequently express their inability to finish assessment tasks. So, they are inclined to construct low-power relations using discourse strategies such as confirming questions and explanations.

Meanwhile, low-power construction reflects the "negative quality" due to their lack of ability (Spencer-Oatey, 2008, pp. 11-47), but its fundamental purpose is to maintain a positive demeanor. Once the older adults indicate their cognitive decline, even if they misbehave in subsequent assessments, it will not harm their cheerful faces. It indicates that power is a pragmatic resource constructed through discourses to achieve communicative goals.

It is evident that institutional interaction is interpreted by members differently than it would be in spontaneous conversation. The examiners are in a superior position because they have institutional authority. Their right to control the assessment process and bestow grades has been legitimated. In comparison, older adults have superiority because of greater age, which conventionally marks high power. Respecting older adults is an excellent traditional

virtue of the Chinese nation. Older adults have higher social status or power because they have made important contributions to the Party, the country, the society, their work, and their families, and won respect from the society. Young people should treat them with gratitude and great respect.

Nevertheless, examiners' expertise leads to their superiority in clinical assessment. Recognition of an inferior position leads the older adult to show deference to the examiner, which is just the same as in the previous study (Nair-Brodeur, 1995). For instance, the older adult seldom exerts power over the examiner through directives. Faced with complex assessment tasks, most older adults confess politely, while smiling, that their cognition declines due to increased age (see Excerpt 10). Although the examiners mainly construct their high power, they are still trying to build rapport with the older adults simultaneously. For instance, the examiners frequently adopt internal and external modifications when they request the older adults to finish their assessment tasks, mitigating power asymmetries between them (see Excerpt 1). In summary, politeness plays a crucial part in negotiating power (Paramasivam, 2007). Both parties give in to each other to accommodate the interlocutor's wants when displaying their power (see Excerpt 4), which aligns with a former investigation (Ainsworth-Vaughn, 1995).

5.3.2 Mechanism of Constructing Power Relations

The examiner's high power and the older adult's low power are prevalent in the examiner-elderly patient interaction. After observing and analyzing multifarious types of power relations from the perspective of multimodal pragmatics, it can be concluded that power is constructed through verbal and non-verbal communicative resources in communicative interaction. As exemplified by Huang et al. (2023), previous research predominantly focuses on specific speech acts, like the refusal speech act in cognitive assessments. However, this study pioneers an exploration into how both examiners and older adults collaboratively utilize speech acts and discourse strategies for power relations.

The multimodal critical discourse analysis of the data suggests that divergent power relations are crafted by examiners and older adults. The examiners wield power in the cognitive assessment explicitly through specific discourse strategies such as requesting, interruption, evaluation, directive, and rhetorical questions, as well as the adoption of some non-verbal communicative resources like meaning-laden gestures, smiles, prosody, and body postures. The older adults construct high power using interruption, rhetorical questions, and directive strategies. Meanwhile, they claim their low power relations with the confirming questions and explanations. Notably, older adults adopt more non-verbal resources to exercise power. As Perkins (2007) points out, individuals employ both verbal and non-verbal resources in spoken communication. Multimodal resources like non-verbal acts indeed play a different role in assisting different speakers.

Contrary to the common belief in the asymmetry of power relations between doctors and patients, the interdependence and variability of power relations between examiners and elderly patients emerge as a nuanced reality. The dynamics of power relations fluctuate from moment to moment in this context.

5.3.3 Dynamic Feature of Constructing Power Relations

Our comprehensive observation of the cognitive assessment process reveals the dynamic construction of power, aligning with previous findings that power evolves continually throughout discourse emergence (Nair-Brodeur, 1995). According to the linguistic adaptation theory, dynamism refers to changes that occur in the temporal dimension of communication (Verschuere, 2000). The linguistic adaptation theory posits dynamism as temporal changes in communication (Verschuere, 2000). For instance, in Excerpt 6, the examiner's requesting speech act initially establishes high power, fulfilling responsibilities. However, the older adult's directive response empowers them, reducing the examiner's dominance. The older adult's lack of understanding prompts a request for clarification, showcasing the dynamic transformation of power relations driven by current communicative needs.

The application of the linguistic adaptation theory is exemplified in the dynamic adjustment of power relations based on the addressee's response. In the cited example, recognizing the older adult's confusion, the examiner rephrases the question, effectively mitigating power asymmetry. This illustrates the theory's validity in explaining the dynamic nature of power.

5.3.4 Contributing Factors of Constructing Power Relations

A multitude of factors influence the construction of power relations. While the older adult's age aligns with Chinese cultural norms, examiners leverage expertise and limited medical resources to establish higher power. The ongoing interaction between examiners and elderly patients unfolds under the influence of various factors, leading to the adoption of diverse discourse strategies for power relation construction.

Patients exhibit a higher level of interdependent self-construal in doctor-patient interaction in the Chinese context (Min et al., 1999), which means Chinese patients value relationships with others. And then rapport orientation (Spencer-Oatey, 2008) is a common social aspiration and goal in interpersonal communication, while the principle of *renqing*¹ in the Chinese cultural context should be a practical principle to achieve this orientation. The realization of the principle of *renqing* includes face maintenance and face promotion (He & Ran, 2001). To meet different communicative needs, the examiner and the elderly-patient claimed different types of power following the principle of *renqing* and finally realized rapport management. For example, the examiner willingly accepted the older adult's directive and maintained his face at the same time in Excerpt 6, where the older adult asserted higher power. As the Chinese proverb says, "expand the respect of the aged in one's family to that of other families," and accepting older adults' high power also reflects Chinese cultural values.

On the contrary, as is shown in Excerpt 10, the older adult occasionally claimed their low power caused by cognitive decline in aging. In terms of discourse strategies used to construct power relations, the language ability of older adults is reduced, so the older adults may activate pragmatic compensation mechanisms, which means the sensory-motor system is utilized to compensate for deficiencies in the language system. This phenomenon results from mutual

¹ *Renqing* is a practice of human relationships advocated by Confucian thought in the context of Chinese culture, and it is a behavioral norm for constructing harmonious relationships between people.

compensation and support between different sensory modalities of the brain and its nervous system (Zhou & Huang, 2023). So it can be concluded that aging influences the older adult's power relation construction culturally, physiologically, and cognitively.

To some extent, examiners' expertise determines that examiners frequently exercise higher power in cognitive assessment. It is obvious that examiners exert a dominant role in cognitive assessment. They have the superiority for topic control, which can be seen in Excerpt 2. Meanwhile, their communicative goals are also affected by limited medical resources. For example, since assessment time is strictly restricted, one of the examiners' communicative goals is to finish the assessment tasks as soon as possible, so the examiners wield their power to make full use of time resources.

In sum, speech content, non-verbal acts, and prosodic features interact synergistically to construct power relations and achieve communicative goals. The reciprocal influence between power relations, communicative goals, and older adults' discourse choices is depicted in Figure 1, highlighting the interactive nature of the mechanism.

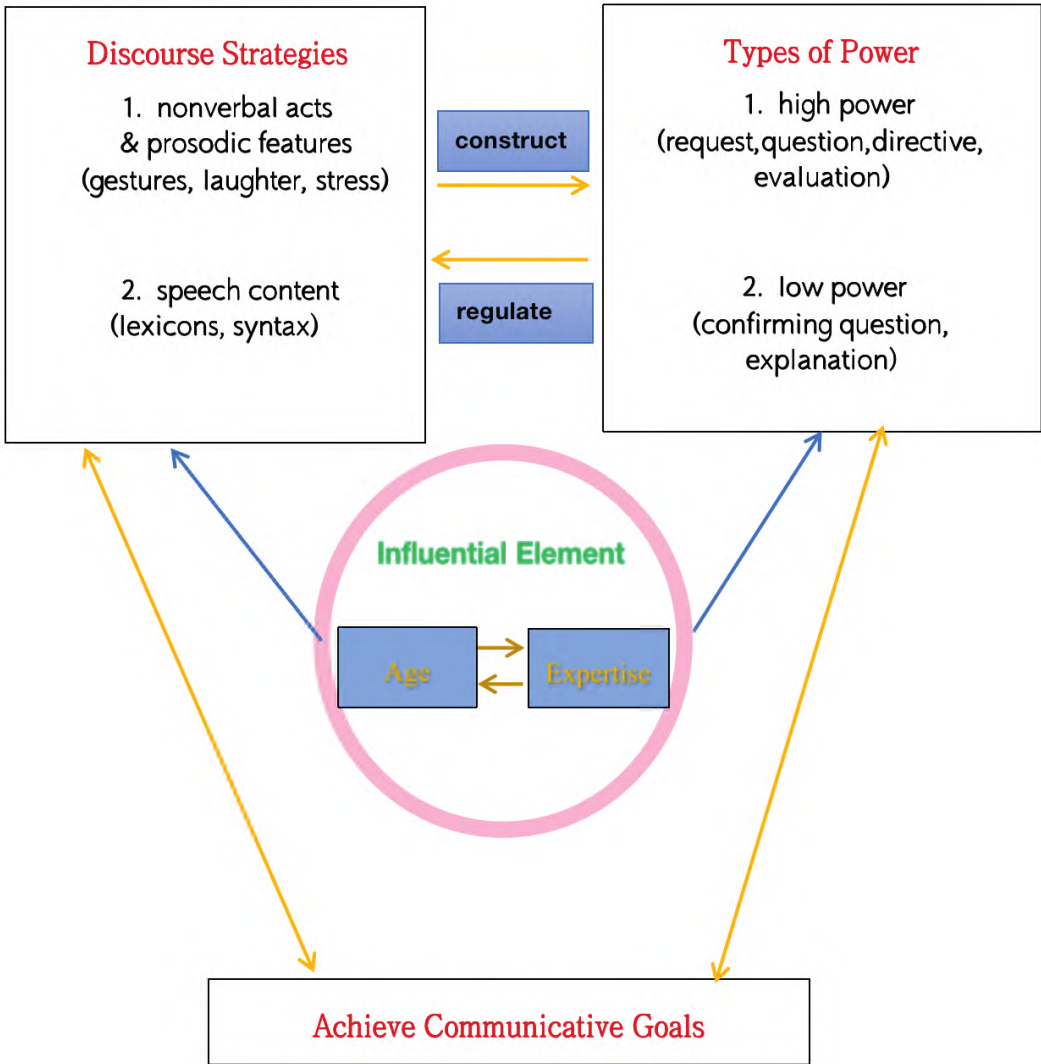
6. Conclusion

This study explored power dynamics between examiners and older adults during cognitive assessments, elucidating the manifestation of discourse strategies for distinct communicative goals. A multimodal analysis revealed that examiners predominantly assert high power, employing strategies like requesting speech acts, interruption, evaluation, rhetorical questions, and directives. Simultaneously, both parties express low power through confirming questions and explanations, utilizing various communicative resources to enact their power.

Claiming power is a pragmatic phenomenon, and the pragmatic resource attributes of power are directly related to communicative goals (Ren, 2015). Different pragmatic motivations contribute to different power relations. In order to complete assessment tasks, both the examiners and elderly patients choose different discourse strategies driven by different pragmatic goals; Consequently, power relations between them are constantly adjusted and help to coordinate the realization of communicative goals. The examiners have to perform their responsibilities in a limited time, so they usually exert power over the older adults, which indicates that their role in this institutional setting determines their acquiescent high power. Older adults constructed low power to reveal their poor cognitive abilities due to greater age, so we can conclude that the fundamental pragmatic motivation is maintaining their cheerful faces. Moreover, examiners' expertise is a main factor that helps them assert high power. In sum, the elderly patient's greater age and the examiner's expertise are the main factors influencing power construction in cognitive assessment. The two factors negotiate with each other depending on communicative needs. Additionally, both parties make use of gestures, smiles, prosody features, and other non-verbal communicative resources to exercise power synergistically, which further demonstrates that it is essential to analyze interpersonal pragmatic issues from a multimodal perspective and explore the role of different modalities in constructing a certain interpersonal pragmatic phenomenon (Huang & Yang, 2023).

Older adults in China are generally considered respected and powerful people. On the

Figure 1
The Interactive Mechanism of Constructing Power Relations



other hand, older adults employ discourse strategies that are different from those of young examiners to construct power relations because of their cognitive and psychological aging. That is why aging can affect power relations construction in examiner-elderly patient interaction in cognitive assessment within the Chinese context.

Moreover, examiners and older adults gravitate towards rapport-focused discourse strategies to mitigate power imbalances, showcasing heightened sensitivity to face-threatening situations. Politeness in discourse negotiation does not imply powerlessness; instead, it underscores the shared goals of deference and rapport, as revealed in this study.

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Chinese Abstracts 中文摘要

语言学视角下失语症研究可视化分析(2000-2019)

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摘要: 本文旨在从语言学的角度, 分析2000年至2019年间关于失语症研究的变化与未来趋势。通过文献计量学方法, 本研究回顾了3,004篇在语言学框架下包含“失语症”主题词的研究文献。研究数据来源于Web of Science数据库, 涵盖了2000年至2019年间发表的相关文献。利用CiteSpace软件, 本研究进行了文献共被引分析、中介中心性测量和引文突现检测, 以探索和确定失语症研究领域内的主题模式、关键研究和新兴研究趋势。本研究识别出过去20年间该研究领域主要呈现出12个研究主题, 研究人员重点关注失语症中的语言障碍、失语症治疗及其他相关研究议题。同时, 具有高中介中心性的论文揭示了不同研究聚类之间的联系。此外, 检测到的引文突现表明, 旨在改善日常生活质量的治疗方法、话语任务的使用、话语治疗、在临床数据方面对原发性进行性失语症的深入探索、工作记忆评估的应用以及工作记忆训练在康复中的作用, 在未来可能会持续受到更多关注。基于聚类可视化分析、中介中心性测量和引文突现检测, 本文发现, 语言学视角下的失语症研究更为广泛地关注沟通障碍缓解相关研究。

关键词: CiteSpace; 失语症; 语言学; 语言障碍; 失语症治疗; 沟通; 文献计量学综述

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汉语失语症患者的习语理解: 案例研究

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摘要: 以往对于失语症患者的习语理解研究主要以印欧语者为研究对象, 关注失语症患者能否正确提取习语目标义, 而对汉语失语症者以及习语熟悉度、语境等影响习语理解等变量考察不足。因此, 本研究旨在探究汉语失语症患者能否正确理解习语目标义的基础上, 进一步考察熟悉度与语境两种影响因素的作用。针对三位中国失语症患者, 本研究采用习语词汇匹配任务, 以汉语四字格成语为实验刺激, 通过操纵习语项目的熟悉度和语境存在状态, 提供含有目标义、字面义、无关抽象义和无关具体义的诱饵词作为习语项目的匹配词汇。结果提示失语症患者无法正确提取习语目标义且呈现字面义倾向和弱抽象义倾向, 熟悉度对其习语理解影响强于语境。以上结果支持分级凸显假说。

关键词: 失语症; 习语理解; 汉语四字格习语; 分级凸显假说; 案例研究

在中国背景下对口吃者的态度: 关于知识来源影响的探索性研究

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摘要: 公众的态度可能会影响口吃者的生活体验。本研究调查了中国公众对口吃者的态度。通过网络书面调查, 结合封闭式和开放式问题, 旨在深入了解公众态度。来自26个省和3个直辖市的102名受访者对生活中的口吃者在性格、言语、社交生活、工作、生活参与、教育、约会与婚姻、能力及沟通技巧等方面进行了评价。研究发现, 公众在这些领域对口吃者普遍持有负面态度。对口吃者的态度因知识来源的不同而有所变化。与口吃者的熟悉程度可能会减少刻板印象, 而来自媒体的知识可能会加剧刻板印象。文章还讨论了研究的启示及未来研究方向。

关键词: 公众态度; 口吃者; 性格; 沟通技巧; 熟悉程度; 媒体

老年认知评估互动中的权势关系研究: 基于多模态语用学视角

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摘要: 本研究主要考察临床语境下老年人进行认知评估时的权势关系建构问题。语料源自9名中国老年人在进行蒙特利尔认知评估(MoCA-B)(中文版)时的录音录像数据, 研究通过多模态语用学视角进行注释和分析。结

果发现,认知评估员和老年人在使用言语行为实现交际目标的过程中,双方的权势关系得以不断显现。评估员倾向于利用请求、打断、评价、反问和指令等话语策略来建构自己的高权势;而老年人则通过指令、反问和打断等话语策略来建构高权势。双方都会通过确认性问话和解释来建构自己的低权势。同时,双方协同调用手势、微笑、韵律特征等非言语交际资源来共同建构权势。研究表明,在医疗健康等专业机构的互动语境下,年龄也会对权势关系的建构产生影响。老年人的高龄和评估员的专业技能相互拉锯,共同影响双方在互动中的权势关系建构。

关键词: 权势关系;认知评估;话语策略;老龄

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语言老化领域2013–2022年间的可视化研究

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摘要: 老龄化常常伴随着认知能力衰退。语言与认知紧密相关,而语言能力上的变化也是认知能力变化的一个重要标志。本研究旨在探索语言老化领域的主要聚类、关键文章和新兴发展趋势。本研究使用 Web of Science 核心数据库检索了2013–2022年间3,266条文献,采用文献共被引、弗里曼的中介中心性和克莱因伯格的突显分析算法,研究了语言老化领域的主要聚类、关键文章和新兴发展趋势。主要聚类包括认知、双语、言语生成、听努力度和阅读理解等,近期最活跃的聚类为阿尔茨海默症。关键文章主要探讨了理解听努力度框架、新语言理解容易度模型、层次化多表征语言理解生成框架的相关研究。统计方法精进、在语言与认知损伤的关系方面的研究以及在语言能力与认知的关系方面的研究是语言老化领域的新兴发展趋势。这些新型发展趋势可以帮助进一步理解老龄化过程中认知能力对语言能力的影

关键词: 语言;老龄化;认知;CiteSpace;科学计量学

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帕金森病伴发的低动力性构音障碍中的平滑前频谱峰突分析

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摘要: 平滑倒谱峰突出度(CPPs)是从突出倒谱峰到其正下方的线性回归线的距离的测量值。CPPs数据采集和分析的变化导致临床截止值的复杂性,并且对于特定的语音障碍(例如与帕金森病(PD)相关的运动性构音障碍)也没有令人满意的值。本研究检查了与PD相关的运动性构音障碍患者与健康参与者的CPP。结果显示,持续元音和连续语音的语音任务存在显著差异,连续语音的CPP对PD参与者的发音障碍和性别差异更敏感。PD参与者中的男性对持续元音的CPP高于女性,对连续语音的CPP低于女性。这意味着需要一致的临床应用方案,并且需要多种声学测量来确定临床决策的准确性。

关键词: 倒谱峰突出;运动性构音障碍;声音;帕金森病;运动性言语障碍

孤独症儿童语言发展文献研究:基于科学计量学的初步分析

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摘要: 孤独症谱系障碍(ASD)在全球的流行率较高,受影响的儿童在语言学习和运用方面经常面临挑战,这一现象引起了学术界的极大关注。然而,以往的综述往往基于主观经验而非更为严谨的筛选标准。本研究旨在利用 Citespace 6.2.R5 分析工具,对孤独症儿童语言发展的科学文献进行系统梳理。我们从 Web of Science 数据库中提取数据,以可视化方式分析了相关研究特点与趋势。通过文献引文分析和新兴趋势分析,识别出七个关键的研究聚类及其时间序列,同时涵盖了研究热点,如语言障碍的诊断与干预、社会交往能力、语言习得以及多语言和多元文化影响等。研究结果揭示了当前研究存在的问题,包括样本量不足,ASD 儿童接受性语言发展尚未受到重视以及跨文化对比研究较为欠缺。同时,对于孤独症儿童语言发展的跨学科研究的广度和深度亟需进一步拓展。本研究为孤独症领域研究人员和从业者提供了较有价值的文献参考。

关键词: 语言发展;孤独症儿童;科学计量分析;ASD;初步研究

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