

Nandao meijun yinggai jixu zai Afuhan zhujun ma?  
nandao US-army should continue at Afghanistan stay Y/N-Q  
=‘The US troops shouldn’t continue to stay in Afghanistan.’

3. **Information-seeking Question (IQ):** *nandao-p?* can be used in a context with contextual evidence in support of  $p$  or against  $\neg p$ . The evidence will weaken the speaker’s original belief of  $\neg p$  resulting a biased question reading.

(3) Context: Policeman A strongly believes criminal B has not escaped. During a search, A finds a receipt of yesterday’s flight in B’s name. A asks his colleagues:

Nandao ta feizou-le ma?  
nandao he fly.away-ASP Y/N-Q  
‘He hasn’t escaped, right?’  $\neq$  ‘He hasn’t escaped.’

## 2 Semantic properties of *nandao-Q*

1. *Nandao-Qs* **necessarily** express bias: it cannot be used a in neutral context where the speaker has no ideas of the answers and there is also no contextual evidence for any possible answers.

(4) (A sits in a windowless room working. A doesn’t know anything about the weather outside and does not have any expectation of the weather too. At 10, B enters the room. Then A asks B:)

Waimian xiayu-le ma?  
outside rain-ASP Y/N-Q  
‘Is it raining outside?’

# Nandao waimian xiayu-le ma?  
nandao outside rain-ASP Y/N-Q  
‘It is not raining outside, right?’

# Nandao waimian mei xiayu ma?  
nandao outside not rain Y/N-Q  
‘It is raining outside, right?’

2. *Nandao-Qs* convey an **epistemic** bias.

(5) (A sits in a windowless room working. A doesn’t know anything about the weather outside and does not have any expectation of the weather too. At 10, B enters the room with a dripping wet raincoat. Then A asks B:)

Waimian xiayu-le ma?  
Outside rain-ASP Y/N-Q  
‘Is it raining outside?’

# Dedicated Bias Particles: A case study of Mandarin *nandao*-Qs

Supplementary materials for poster presentation at GLOW in Asia 2017

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## 1 Introduction

1. **Rhetorical Question (RQ):** *Nandao-p?* can be used in a neutral context where  $\neg p$  is a mutual belief or commonsense knowledge held by both sides of the interlocutors, even though there are no readily available evidence for  $p$  or against  $p$  in the speech context.

(1) Context: A's house is messy. One day, A's classmate B is visiting him and suggests that he clean it.

A: Nandao ni shi wo ma ma?  
nandao you be I mom Y/N-Q  
='You are not my mom!'

In (1), A holds a strong belief that *B is not A's mom* and does not consider the alternative possibility (i.e. *B is A's mom*). A's use of the *nandao*-Q can be classified as rhetorical since both A and B know that B is not A's mom (Rohde 2006, Caponigro & Sprouse 2007).

2. **RQ:** *Nandao-p?* can be used in a context where the speaker has a good reason or contextual evidence to support the speaker's belief of  $\neg p$ . In such a context, the contextual reasoning or evidence strengthens the speaker's belief and makes it a strong one. The *nandao*-Q in such a context is a more traditional type of rhetorical question (Han 2002, Xu 2012).

(2) Context: A and B are two Americans. They are talking about the war in Afghanistan. A thinks the US should retreat, while B disagrees.

A: The US government cannot spend more money to keep the troops in Afghanistan.

B: But Al-Qaeda is still in power. We need the US troops to eliminate them once and for all.

A: More than two thousand soldiers have died.

### 3 Discourse properties of *nandao*-Q (Additional)

1. *Nandao*-Qs do not show anti-backgrounding effect.

(10) Context: A and B are two Americans. They are talking about the war in Afghanistan. A thinks the US should retreat, while B disagrees. (= (2))

A: The US government cannot spend more money to keep the troops in Afghanistan.

B: But Al-Qaeda is still in power. We need the US troops to eliminate them once and for all.

A: More than two thousand soldiers have died.

Nandao meijun yinggai jixu zai Afuhan zhujun ma?  
nandao US-army should continue at Afghanistan stay Y/N-Q  
='The US troops shouldn't continue to stay in Afghanistan.'

### 4 Syntactic properties of *nandao*-Q (Additional)

1. Generally, *nandao* can surface freely in sentences before the predicate.

(11) (Nandao) Zhangsan (nandao) bu (\*nandao) renshi Lisi (\*nandao) ma?  
Zhangsan not know Lisi Y/N-Q  
'Zhangsan knows Lisi, right?'

#### 2. Top > *nandao*

(12) (A knows that Xiaoli doesn't know Lisi.) (Contrastive Topic > *nandao*)

A: Zhangsan-ne, nandao (\*Zhangsan-ne) ye bu renshi Lisi?  
Zhangsan-CT nandao also not know Lisi  
'Zhangsan knows Lisi, right?'

(13) Zheren nandao shi Xiaoming ma? (Definite DP > *nandao*)

This.person nandao be Xiaoming Y/N-Q  
'This man is not Xiaoming, right?'

(14) \* Zhishao wuben shu nandao Lisi yao kan ma? (\* Indef DP > *nandao*)

at.least 5.CL book nandao Lisi need read Y/N-Q  
'Lisi does not need to read at least 5 books, right?'

(15) Nandao Lisi yao kan zhishao wuben shu ma? (*nandao* > Indef DP)

nandao Lisi need read Y/N-Q  
'Lisi does not need to read at least 5 books, right?'

- # Nandao waimian xiayu-le ma?  
 Nandao outside rain-ASP Y/N-Q  
 ‘It isn’t raining outside, right?’
- # Nandao waimian mei xiayu ma?  
 Nandao outside not rain Y/N-Q  
 ‘It is raining outside, right?’

3. *Nandao*-Qs convey a bias that is **speaker-oriented**.

- (6) A: Nandao Zhangsan bu xihuan shuiguo ma?  
 nandao Zhangsan not like fruit Y/N-Q  
 Bias = ‘A believes that it is more likely that Zhangsan likes fruits’.  
 Bias  $\neq$  ‘(Generally/In fact), It is more likely that Zhangsan likes fruits.’  
 Bias  $\neq$  ‘From what you (addressee) believe it is more likely that Zhangsan likes fruits.’

4. *Nandao* exhibits a **global scope**.

- (7) *Nandao* > negation

A: Zhangsan bu xihuan shuiguo ma, nandao?  
 Zhangsan not like fruit Y/N-Q nandao  
 Bias = ‘A believes that it is more likely that Zhangsan likes fruits’.  
*nandao* >  $\neg$   
 (N/A) Bias = ‘A doesn’t believe that it is more likely that Zhangsan likes fruits.’  
\*  $\neg$  > *nandao*

- (8) *Nandao* >  $\forall$

A: Nandao meige ren dou yao qu ma?  
 nandao each.CL person DOU need go Y/N-Q  
 ‘It is not the case that everyone needs to go, right?’ *nandao* >  $\forall$   
 (N/A) ‘For every person  $x$ , *nandao* does  $x$  need to go?’ \*  $\forall$  > *nandao*

- (9) *Nandao* >  $\diamond$

A: Nandao Zhangsan keneng qu Meiguo ma?  
 nandao Zhangsan possibly go America Y/N-Q  
 Bias = ‘A believes that *it is impossible that Zhangsan goes to America* is more likely.’ *nandao* >  $\diamond$   
 (N/A) Bias = ‘It is possible that A believes that it is more likely that *Zhangsan goes to America*.’  
\*  $\diamond$  > *nandao*

(21) **IMs:** ×

- a. chaymanta-pas willay-man-chis [...] qaynuchay p'unchay-taq=**sis** huk  
then-ADD tell-1O-PL yesterday day-CONTR=REP one  
wayna arma-ntin=**sis** ka-n-man ka-ra-n hinaspa  
young.man weapon-INCL=REP be-3-COND be-3-PST then  
wañu-ra-chi-pu-sqa enamorada-n-ta.  
die-CAUS-BEN-NX.PST girl.friend-3-ACC  
'We are also told (the following). Yesterday there was a young man with a  
weapon, he then killed his girlfriend.' (Faller 2014: (32))

## 6 Properties of VERUM and High Negation

(22) VERUM focus in declaratives (bold part):

A: Karl hat bestimmt nicht gelogen  
Karl has definitely not lied  
'Karl definitely has not lied.'

B: (nein) Karl **hat** nicht gelogen  
no Karl has not lied  
'(No,) Karl HAS not lied.'

≈ 'It is true that Karl has not lied.' (adapted from Höhle (1992: (4)))

(23) VERUM focus in Y/N-Qs:

(It is said that Karl has kicked the dog.)

A: **hat** er den Hund denn getreten?  
has he the dog DENN kicked  
'HAS he kicked the dog?'

≈ 'Is it true that he has kicked the dog?' (adapted from Höhle (1992: (8)))

(24) VERUM focus in WH-Qs:

A: ich habe den Hund nicht getreten, und Karl hat es auch nicht getan  
I has the dog not kicked and Karl has it too not kicked  
'I haven't kicked the dog, and so hasn't Karl.'

B: wer **hat** den Hund denn getreten?  
who has the dog DENN kicked  
'Who HAS kicked the dog?'

≈ 'It is true that Karl has not lied.' (adapted from Höhle (1992: (11)))

## 5 Properties of Presupposition, Conventional Implicature, and Illocutionary Modifiers

### 1. Backgrounding effect.

(16) **Presupposition:** ✓

- a. John entered a bar and saw a man near the counter. The man was tall and handsome.
- b. John entered a bar and saw a man near the counter. # The woman was tall and beautiful.

(17) **CI:** ×

- a. Lance Armstrong is a professional road racing cyclist. When reporters interview Lance, a cancer survivor, he often talks about the disease.

(18) **IMs:** ×

- a. Alas, it is raining. (Faller 2014: (30a))
- b. Context: the speaker describes the reactions of people when the train first came to their region.
  - i. tren tren imayna=**chá**  
train train how=CONJ  
'The train, the train, how might it be?'
  - ii. kuru hina=**s** suchu-n  
bug like=REP crawl-3  
'It crawls like a bug (they say).'
  - iii. yana animal=**si**  
black animal=REP  
'It's a black animal.' (Indirectly quoted from *ibid.*:(31))

### 2. Anti-backgrounding effect:

(19) **Presupposition:** ×

- a. John entered a bar and saw a man near the counter. The man was tall and handsome. (= (16a))

(20) **CI:** ✓

- a. # Lance Armstrong survived cancer. When reporters interview Lance, a cancer survivor, he often talks about the disease.

(adapted from Potts 2003: (1.40))

## References

- Caponigro, I. & J. Sprouse. 2007. Rhetorical questions as questions. In E. Puig-Waldmüller (ed.), *Proceedings of Sinn und Bedeutung 11*, 121–133. Barcelona: Universitat Pompeu Fabra.
- Domaneschi, Filippo, Maribel Romero & Bettina Braun. To appear. Bias in polar questions: Evidence from English and German production experiments. *Glossa* 1–28.
- Faller, Martina. 2014. Reportativity, (not-)at-issueness, and assertion. In *Proceedings of the annual meeting of berkeley linguistics society (bls) 40*, 62–84. BLS.
- Han, Chung-Hye. 2002. Interpreting interrogatives as rhetorical questions. *Lingua* 112. 201–229.
- Höhle, Tilman N. 1992. Über verum-fokus im deutschen. In Joachim Jacobs (ed.), *Informationsstruktur und grammatik*, 112–141. Wiesbaden: VS Verlag für Sozialwissenschaften. doi:10.1007/978-3-663-12176-3\_5. [http://dx.doi.org/10.1007/978-3-663-12176-3\\_5](http://dx.doi.org/10.1007/978-3-663-12176-3_5).
- Potts, Christopher. 2003. *The logic of converyntional implicatures*: UCSC dissertation. <http://web.stanford.edu/~cgpotts/dissertation/potts-dissertation-1up.pdf>.
- Rohde, H. 2006. Rhetorical questions as redundant iterrogatives. *San Diego Linguistic Papers* 2. 134–168.
- Xu, Beibei. 2012. *Nandao*-Question as a special kind of Rhetorical Question. In Anca Chereches (ed.), *Semantics and linguistic theory (SALT) 22*, 508–526.

(25) VERUM focus in imperatives:

A: nun **hör** doch damit auf  
 now listen DOCH so to  
 ‘Now stop it!’

**nimm** dir endlich einen Stuhl.  
 take you finally the chair  
 ‘TAKE the chair!’

(adapted from Höhle (1992: (32)))

		ORIGINAL BIAS			
		<b>p</b>	<b>Neutral</b>	<b>¬p</b>	
CONTEXT- UAL EVIDENCE	<b>p</b>		PosQ/ <i>Really</i> -PosQ	<i>Really</i> -PosQ	
	<b>Neutral</b>	HiNQ(outer)	PosQ		
	<b>¬p</b>	HiNQ(outer/inner)	LowNQ		

**Table 1** Overview of the primary choices in English and German.

(Domaneschi, Romero & Braun To appear: Table 20)