1. Intro  Using original elicited data, I analyze why Mandarin yīwéi conveys that the belief it embeds is false/questionable. I argue that $x \text{ yīwéi } p$ has an at-issue meaning of $x \text{ believes } p$ and a projecting requirement that the Common Ground (CG) remains compatible with not-$p$ after it’s updated with $x \text{ believes } p$: a postsupposition (Farkas ’02, Brasoveanu ’09, Lauer ’09: mirror of a presupposition). Speaker’s choice to use yīwéi thus triggers context-dependent pragmatic inferences: that Speaker thinks $p$ is false/dubious and/or questions $x$’s evidence.

2. Data  Belief reports trigger complex reasoning (e.g., Simons ’07, Anand & Hacquard ’14): Is the content of the belief credible? Is the belief-holder reliable? Why did Speaker report a belief vs. make a direct claim? Belief verbs help guide this process: in Mandarin, factive zhídào ‘know’, neutral rènwéi ‘think’ (1), or the negatively biased yīwéi (2), which signals skepticism.

(1) Māmā rènwéi wǒ bìng le
    Mother think I sick ASP
    ‘Mom thinks I’m sick’
    (leaves open whether sick or not)

(2) Māmá yīwéi wǒ bìng le
    Mother yīwéi I sick ASP
    ‘Mom has the impression that I’m sick’
    (suggests: not sick)

Discourse-initially, (2) implies that Speaker is not sick; when it’s already CG that Speaker is not sick, (2) reinforces that. If it’s CG that Speaker is sick, (2) is nonsense.

Yīwéi can also be used in a context in which Speaker does not know whether the reported belief is true or not, but wants to signal that the belief is not fully evidenced. (3) could be used if an American football player catches the ball and begins visibly celebrating – oblivious that the officials are congregating to debate whether the catch counted. (3) still conveys skepticism, but the effect is no longer to convey that the belief is false – just insufficiently informed. (But if we just see the athlete catch the ball on the sideline and begin celebrating – with no reason to question his belief – then (3) is rejected: ‘if you don’t know, why say he’s wrong?’)

(3) wǒ bù zhídào yǒu-méi-yǒu dèfēn, dānshì zhègè qiúyuán yīwéi dèfēn le
    I not know have-not-have score, but this-CL ball-player yīwéi score ASP
    ‘I don’t know whether the player scored or not, but he’s under the impression that he did.’

The inference that the belief is false behaves like a conversational implicature (Grice 1975), in that it can be reinforced without redundancy, and cancelled without contradiction (4). The latter is an unusual discourse move, in that it first leads hearers to infer that this person is not a billionaire, and then abruptly tells them that she is, requiring a specific rhetorical goal: ‘I have a friend who invented a famous app. People yīwéi she’s a billionaire – and she actually is, but she never made money on that app. Her fortune is inherited.’

(4) rěnmén yīwéi tā shì yīwàn fùwěng … { dānshì tā bù shí/ér tā dīquè shí }
    people yīwéi 3sg be billionaire … { but 3sg not be/and 3sg actually be }
    ‘People are under the impression that she’s a billionaire … { but she’s not/and she actually is }’

1st-person yīwéi has 2 uses, each reconciling in a different way Speaker’s stated belief in $p$ with the skepticism of yīwéi. Most commonly, it conveys that Speaker previously believed $p$ but now rejects/questions it (5) (since Mandarin tense is inferred pragmatically). Less commonly, 1st-person yīwéi signals that Speaker currently believes $p$ but invites hearers to disagree (6). (With rènwéi instead of yīwéi, (5) would report Speaker’s current belief; (6) would be less hedged.)

(5) wǒ yīwéi jīntiān yǒu ge jiāngzuò (6) wǒ gèrén yīwéi nǐ yīnggài qù
    I yīwéi today have CL talk I personally yīwéi you should go
    ‘I used to think there was a talk today.’
    ‘Personally, I would think you should go.’

The negative bias of yīwéi projects (Chierchia & McConnell-Ginet 1990) out of conditionals, possibility modals, questions, etc (though can’t directly combine with negation). In sum, yīwéi conveys projecting, context-dependent skepticism towards the belief $p$: $p$ may be false, questionable, hedged, or improperly evidenced. What semantics/pragmatics explains these facts?
3. Analysis Assume an update semantics (Stalnaker ’79), where an accepted assertion of sentence \( S \) shrinks the CG to include only the worlds where \( S \) is true. Here, a **presupposition** is a definedness condition on the CG prior to the assertion: \( x \text{ knows } p \) updates the CG with \( x \text{ believes } p \) and is only defined if \( p \) is already CG \((7)\). We can also place a definedness condition on the CG after the assertion – a **postsupposition**. I propose that \( yiw\text{ei} \) updates the CG with \( x \text{ believes } p \) and is only defined if, after that update, it is compatible with the CG that \( \neg p \) \((8)\). Informally, no matter how reliable \( x \) is/no matter how plausible \( p \) is, we are not to take it up. If \( yiw\text{ei} \) only presupposed that the CG is compatible with \( \neg p \), then \( p \) could be taken up after the assertion on the grounds that \( x \) believes it (even if it was unknown before that); but the post-supposition prevents that scenario. Informally, \( yiw\text{ei} \) conveys, ‘\( x \) believes \( p \), but don’t take their word for it’. Finally, I take \( x \text{ r\text{en}w\text{ei} } \) ‘thinks’ \( p \) to just update the CG with \( x \text{ believes } p \), with no definedness condition; so it can be used in a wider variety of contexts.

\[(7)\quad \text{update effect and presupposition of } \text{know} \quad c + x \text{ knows } p = c + x \text{ believes } p \quad \text{defined iff } \forall w[ w \in c \rightarrow p(w) = 1] \]

\[(8)\quad \text{update effect and postsupposition of } yiw\text{ei} \quad c + x yiw\text{ei} p = c + x \text{ believes } p \quad \text{defined iff } \exists w \in c + x \text{ believes } p: p(w) = 0 \]

Since \( yiw\text{ei} \) signals that \( p \) can’t become CG, it cannot be used if \( p \) were already CG prior to the assertion; nor if it were CG that \( \neg x \text{ believes } p, \neg then \ p. \) As a result, a speaker’s choice to use \( yiw\text{ei} \) triggers pragmatic inferences that \( p \) is false/questionable and/or that \( x \) is uninformed. E.g., in (2), Speaker signals that Mom’s belief (that they’re sick) should not be taken up. Speaker presumably has an opinion whether they’re sick or not \((p \lor \neg p); \) by post-suppositionally signaling \( \phi \neg p, yiw\text{ei} \) comes to convey \( \neg p: \) that Speaker is **not** sick. The inference that \( p \) is false is therefore derived pragmatically from the combination of \( yiw\text{ei}’s \) semantics with background assumptions about whether Speaker has an opinion re: \( p. \) As a pragmatic inference, it’s not surprising that it can be reinforced and canceled \((4)\).

When Speaker claims not to have an opinion whether \( p \) \((3)\), the use of \( yiw\text{ei} \) (over the more common, neutral \( r\text{en}w\text{ei} \ ‘think’ \) ) signals that the CG can’t contain \( \neg x \text{ believes } p, \neg then \ p, \) thus questioning the athlete’s reasoning. As for the ‘past’ 1st-person use \((5)\), Speaker’s choice of \( yiw\text{ei} \) (perhaps combined with an assumption that they have an opinion whether \( p \) ) conveys that Speaker currently questions or disbelieves \( p: \) sensible if \( (5) \) describes their past belief. In \((6)\), Speaker believes \( p \ ‘you should go’, \) but explicitly prevents it from becoming CG in case the hearer disagrees (hedged). As non-at-issue definedness conditions, postsuppositions **project** much like presuppositions (Lauer ’12), explaining why \( yiw\text{ei}’s \) effect persists in projection contexts. The analysis \((8)\) thus explains its context-dependent negative bias.

4. Significance Postsuppositions have been used for seemingly heterogeneous phenomena – a.o., the scope of numerals (Brasoveanu), nonspecificity (Farkas, Lauer), particular intonation (Constant ’12), and now \( yiw\text{ei}. \) I propose that \( yiw\text{ei}’s \) postsupposition fits into a larger class of those used to prevent pragmatic inferences that may otherwise arise from the main assertion. \( Yiw\text{ei} \) postsuppositionally prevents a potential pragmatic inference from \( x \text{ believes } p \) to \( p, \) just as Farkas/Lauer use a postsuppositional (in)definite to prevent a potential inference that the speaker can identify its referent. Thus, I offer a unified, intuitive understanding of (some) uses of this device. **More broadly**, this paper engages the complex reasoning involved in deciding what to think about what others think, and the cross-linguistic resources used to guide it. Some belief reports are known to be factive, conveying that Speaker endorses the reported belief, while others are nonfactive, silent on what Speaker thinks about it. Enriching this picture, \( yiw\text{ei} \) exemplifies a relatively less-studied class of strategies (recently discussed: Holton ’17, Hsiao ’17, Anvari et al ’18) for reporting beliefs that Speaker views with skepticism.