

Inner vs. Outer A-not-A Questions

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This paper distinguishes two types of A-not-A questions in Mandarin according to their distributions and interpretations: One is triggered by an outer A-not-A morpheme hosted by an assertion projection in the left periphery; the other is licensed by an inner A-not-A morpheme situated on the edge of *vP*. In terms of pragmatics, inner A-not-A can be construed out-of-blue, as in (1a), while outer A-not-A cannot, as in (1b) (cf. Schaffar & Chen 2001):

- (1) a. Akiu **chi-bu-chi** niurou? (inner A-not-A)
 Akiu eat-not-eat beef
 'Does Akiu eat beef?'
 b. Akiu **shi-bu-shi** chi niurou? (outer A-not-A)
 Akiu be-not-be eat beef
 'Isn't it the case that Akiu eats beef?'

This distinction is of particular interest in the context of the cartographic approach advocated by Rizzi (1997) and Cinque (1999), under which we propose a novel way to separate the two constructions in terms of their relation to a variety of adverbials: For instance, inner A-not-A is typically blocked by frequency/manner adverbials, as in (2a), while its outer counterpart, being much higher and discourse-oriented, is subject to no such blocking, as in (2b):

- (2) a. * Akiu changchang/quanshenguanzhudi **kan-bu-kan** dianshi?
 Akiu often/attentively watch-not-watch TV
 'Did Akiu watch TV often/attentively?'
 b. Akiu **shi-bu-shi** changchang/quanshenguanzhudi **kan** dianshi?
 Akiu be-not-be often/attentively watch TV
 'Isn't it the case that Akiu watched TV often/attentively?'

More specifically, we analyze outer A-not-A as the head of AstP (assertion phrase), which is sandwiched between IntP (interrogative phrase) and EviP (evidential phrase), whereas inner A-not-A is taken to be part of the *vP* periphery in the spirit of Ernst (1994) and Law (2006). The dichotomy is spelled out in the following topography of A-not-A questions:

- (3) [IntP Q [AstP A-not-A^{outer} [EviP...[TP...[*vP* A-not-A^{inner} [VP ...]]]]]]

Under this analysis, A-not-A questions are triggered by a cluster of a strong uninterpretable *V* feature and an interpretable *Q* feature: inner A-not-A is associated with the head of *vP*, whereas outer A-not-A is associated with the head of AstP in the left periphery. More specifically, the strong [*uV*] feature is checked off by attracting the closest verbal head, thereby assuming the A-not-A form. At LF, the [*iQ*] feature is further adjoined to Int head to check off the weak uninterpretable *Q* feature in Int (Chomsky 2000, among others). The derivation of an inner A-not-A question thus looks like (4), of which the second step is blocked by an intervening adverb of certain kind (also cf. Law 2006), as is the case with (2a):

- (4) [IntP [*iQ*]-Int_{[*uQ*]] ... [VP Adv [*vP* **V-not-V**-*V*_{[*iQ*, #*V*]} [VP <*V*> ...]]]]}}
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This intervention effect can be avoided by merging *shi* 'be' directly to the Ast head, as we have already seen in (2b).

One piece of evidence for this minimalist/cartographic analysis comes from the fact that light verbs and certain manner adverbs may optionally undergo inner A-not-A construals:

- (5) a. Akiu daodi ba-bu-ba Xiaodi dang yi-hui-shi?
 Akiu at.all BA-not-BA Xiaodi treat one-CL-thing
 b. Akiu daodi [PP ba Xiaodi] dang-bu-dang yi-hui-shi?
 Akiu at.all BA Xiaodi treat-not-treat one-CL-thing
 'Does Akiu treat Xiaodi seriously at all?'


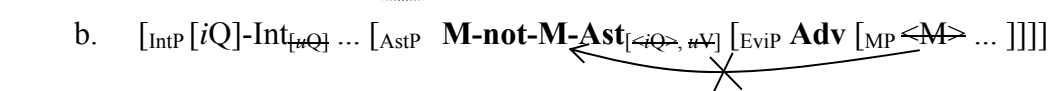
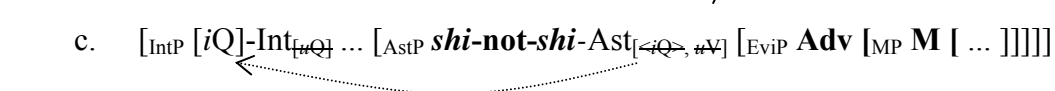
This indicates *ba* can serve either as a light verb, which carries a strong [*uV*] feature triggering inner A-not-A in (5a), or as the head of a PP adjunct, which does not block A-not-A questions like ordinary adverbs, as in (5b). The latter is in line with the behavior of certain locative/temporal expressions, as exemplified below:

- (6) a. Akiu zai-bu-zai jia zuo fan?
 Akiu at-not-at home do meal
 ‘Does Akiu cook at home?’
 b. Akiu [PP zai jia] zuo-bu-zuo fan?
 Akiu at home do-not-do meal

Another argument has to do with a higher version of the intervention effects in the left periphery. As shown in (7a), a verbal epistemic modal like *keneng* ‘possible’ (in contrast to an adverbial one like *dagai* ‘probably’) is subject to A-not-A questions, which may in turn be blocked by an evidential adverb like *xianran* ‘obviously’, as in (7b). Again, the outer *shi*-not-*shi* construal comes to the rescue by merging directly above *xianran*, as in (7c):

- (7) a. Akiu **ke-bu-keneng** hui qu meiguo?
 Akiu possible-not-possible will go US
 ‘Is it (obviously) possible for Akiu to go to US?’
 b. * Akiu xianran **ke-bu-keneng** hui qu meiguo?
 Akiu obviously possible-not-possible will go US
 ‘Is it obviously possible for Akiu to go to US?’
 c. Akiu shi-bu-shi xianran **keneng** hui qu meiguo?
 Akiu be-not-be obviouslypossible will go US
 ‘Is it true that it is obviously possible for Akiu to go to US?’

(8a) thus represents the two steps of forming the outer A-not-A question of (7a) in the left periphery. Along this line, (7b) is ruled out simply because it is impossible for the epistemic modal to be associated with outer A-not-A over *xianran*, as in (8b), presumably due to the “extended” version of the Relativized Minimality entertained by Rizzi (2004). On the other hand, if we resort to the direct merger of *shi* above the evidential adverb, then there is nothing to block the subsequent feature movement to the Int head, as in (8c) (MP: modal phrase):

- (8) a. [IntP [*iQ*]-Int_[#Q] ... [AstP **M-not-M-Ast**_[<iQ>, #V] [MP <M> ...]]]

 b. [IntP [*iQ*]-Int_[#Q] ... [AstP **M-not-M-Ast**_[<iQ>, #V] [EviP Adv [MP <M> ...]]]]

 c. [IntP [*iQ*]-Int_[#Q] ... [AstP **shi-not-shi-Ast**_[<iQ>, #V] [EviP Adv [MP **M** [...]]]]]]


In sum, we have built a fine-grained cartographic analysis of the two types of A-not-A questions based on their correspondences with modals, adverbials and light verbs, as well as their height of interpretation. This move in turn accounts for the fact that only outer A-not-A is speaker-oriented and infelicitous in an out-of-blue context.

Chomsky, N. 2000. Minimalist Inquiries: the Framework. In: *Step by Step: Essays on Minimalism in Honor of Howard Lasnik*, R. Martin, D. Michaels and J. Uriagereka (eds.), 89-155. Cambridge, MA: MIT Press.
 Cinque, G. 1999. *Adverbs and Functional Heads*. Oxford: Oxford University Press.
 Ernst, T. 1994. Conditions on Chinese A-not-A questions. *Journal of East Asian Linguistics* 3, 241–264.
 Huang, C.-T. J. 1991. Modularity and Chinese A-not-A Questions. In: *Interdisciplinary Approaches to Language Essays in Honor of S.-Y. Kuroda*, Carol Georgopoulos and Roberta Ishihara (eds.), 305–332. Dordrecht: Kluwer.
 Law, P. 2006. Adverbs in A-not-A Questions in Mandarin Chinese. *Journal of East Asian Linguistics* (2006) 15: 97–136
 Rizzi, L. 2001. On the position “Int(errogative)” in the left periphery of the clause. In G. Cinque and G. Salvi, eds., *Current Studies in Italian Syntax. Essays offered to Lorenzo Renzi*. 287-296. Amsterdam: Elsevier North-Holland
 Rizzi, L. 2004. Locality and the Left Periphery. In *Structures and Beyond. The Cartography of Syntactic Structures*, vol. 3, Adriana Belletti (ed.), 223-251. New York: Oxford University Press.
 Schaffar, W. and L. Chen. 2001. Yes-No Questions in Mandarin and the Theory of Focus. *Linguistics* 39: 837–870.