PSEUDO-INCORPORATED BARE NPS MAY BE DEFINITE: THE EFFECT OF EVENT-LEVEL SINGULAR ATOMICITY

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CLAIM. Mandarin post-verbal bare NPs (BNPs) are pseudo-incorporated (PI). However, PI-BNPs show an unusual definite semantics if the verb is marked with event-level singular atomicity. These definites are uniqueness definites under pseudo-incorporation (PI); uniqueness is satisfied by (i) singular, atomic event reference of the PI-vP, and (ii) an event-internal singularity presupposition over object reference.

BACKGROUND. Existing literature reports two apparently opposite sets of semantic properties for Mandarin post-verbal BNPs: (i) by default, they display PI properties – number neutrality, obligatory narrow scope and lack of atomicity entailments, as in (1a); (ii) sometimes a definite reading (1b) is also attested.

wŏ măi le shū. b. HúFēi hē -wán (1) a. zuótiān vesterday 1sG buy PFV book drink -finish PFV soup 'I bought (one or more) books yesterday.' 'Hu Fei finished eating the soup.' (Rullmann & You 2006:1) (Cheng & Sybesma 1999:510)

No unifying analysis has been proposed for this polysemy. Cheng & Sybesma (1999) analyze them as surface-identical with different DP projections – though noting that "bounded" predicates are incompatible with the weak indefinite Cl-N structure. Jenks (2018) proposes that definite BNPs are conditioned by situational uniqueness, but does not explain the post-verbal alternation between definiteness and PI.

PUZZLE. In (2a-b), the addition of an atomic-event-level verbal classifier (atomic Cl_V, cf. Paris 2013, Zhang 2017) with a singular numeral shifts the post-verbal BNP gou 'dog' to the definite interpretation (in anaphoric or non-anaphoric contexts). No existing theory accounts for this curious connection.

wǒ zài gōngyuán lǐ sànbù. Tūrán, păo-lái le YÌ ZHĪ GŎU_i. yesterday 1sG be.at park inside stroll suddenly run-come PFV one CL dog 'I was taking a walk in the park yesterday, when suddenly there came A DOG_i running.'

a. ?? wŏ mō le GŎUi. b. wŏ mō le xià 1SG pet PFV dog 1SG pet PFV one ATM.CL_v dog *Intended*: ?? 'I petted THE DOG_i.' 'I petted THE DOG_i [exactly one **stroke-by-***Instead*: 'I petted (one or more) dog(s).' the-hand].'

PROPOSAL. Both the PI and the definite semantics of post-verbal BNPs in Mandarin are derived from a single PI semantics. Canonical PI nominal reference is number-neutral because (i) existential quantification over PI nominals is tethered to the event denoted by the PI-vP (cf. Krifka & Modarresi 2016 a.o.), and (ii) the event denoted by the PI-vP is cumulative (soup-drink) or plural atomic (dog-pet); both instantiate unbounded PI nominal reference.

The non-canonical definite reading of PI-BNPs is uniqueness-conditioned (Jenks 2018), but subject to two additional conditions. (i) Event singularity and atomicity, achievable for cumulative PI events (1b) through telicity marking, and for plural atomic PI events, through atomic event-level singular quantification (2b). (ii) Event-internal singularity presupposition over object reference: different singular atomic events may carry singularity or plurality presuppositions; only the former type can satisfy uniqueness.

PREDICTIONS. (i) predicts that plural quantification with atomic Cl_V's would compromise the definite reading; this is borne out by (3).

- (3) <Same context as in (2)>
 - a. ?? wŏ mō le shí xià GŎU_i. 1SG pet PFV ten ATM.CL_v dog *Intended*: ??I petted THE DOG_i [ten strokes-by-the-hand]. Instead: I petted some dog(s) [ten strokesby-the-hand cumulatively])'
- b. ?? wŏ mō le hǎojǐ GŎU_i. xià 1SG pet PFV quite.a.few ATM.CL_v dog *Intended*: ??I petted THE DOG_i [quite a few strokes-by-the-hand]. *Instead*: I petted some dog(s) [quite a few strokes-by-the-hand cumulatively])'

le tāng.

(ii) predicts lexically plurality-presupposing predicates (collect, compare) would not produce a definite reading on the PI-BNP even when marked with event singularity and atomicity; this is borne out by (4).

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(4) a. ?? zuótiān wǒ kàndào le Yì Zǔ YÓUPIÀO_i. jīntiān wǒ qù shōují le yí xià YÓUPIÀO_i. yesterday 1SG see PFV one set stamp today 1SG go collect PFV one ATM.CL_v stamp Intended: ?? 'Yesterday I saw A SET OF STAMPS_i. Today I did-a-collecting-of THE STAMPS_i'

ANALYSIS. 1. I propose a DRT-based semantics for PI and show the effect of conditions (i) and (ii) on PI nominal reference. (5a) gives the canonical number-neutral semantics of the PI- ν P 'dog-pet' in (2a). Crucially, a PI- ν P introduces an unbounded (cumulative or plural atomic) event DR into the universe – represented as E – with the condition that any sub-event e of E corresponds to some E such that E is the theme of E (cf. Krifka's [1992] E Mapping-to-Object). Number neutrality on E follows from this condition.

(5b) shows that, with event-level singularity and atomicity marking in (2b), the canonically cumulative E in (5a) reduces to a singular atomic e [condition (i)]. The object DR X is also promoted into the matrix universe. Finally, X reduces to a singular x iff. the singular atomic e carries a singularity presupposition over its object reference [condition (ii)]: a single stroke of petting is typically done to a single dog. Uniqueness definite type-shifting can apply only if X can reduce to x, i.e. if both (i) and (ii) are satisfied.

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(5) a. wŏ mō le gŏu. 'I petted (one or more) dogs.' [y \ E \mid y = \text{SPKR} \land y = Ag(E) \land \text{PET}(E) \quad [e \mid \text{PET}(e) \land e \leq_E E] \Rightarrow [X \mid \text{DOG}(X) \land X = Th(e)] \quad ]b. wŏ mō le yı́ xià gŏu. 'I petted the dog [exactly one-stroke-by-the-hand].' [y \ E \mid y = \text{SPKR} \land y = Ag(E) \land \text{PET}(E) \quad \frac{\land ATM(E) \land \#(E) = 1}{[e \mid \text{PET}(e) \land e \leq_E E]} \Rightarrow [X \mid \text{DOG}(X) \land X = Th(e)] \quad ]\equiv [y \ e \ X \mid y = \text{SPKR} \land y = Ag(e) \land \text{PET}(e) \quad \land ATM(e) \land \#(e) = 1 \quad \land \text{DOG}(X) \land X = Th(e)]\equiv [y \ e \ X \mid y = \text{SPKR} \land y = Ag(e) \land \text{PET}(e) \quad \land ATM(e) \land \#(e) = 1 \quad \land \text{DOG}(X) \land X = Th(e)]
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2. Cross-sentential pragmatic resolution of the PI-BNP x is now possible because it is definite and in the matrix universe. (6) gives the DRT analysis of this for context (2-2b).

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(6) K_1 = [x_1 \ e_1 \ | DOG(x_1) \land ATM(x_1) \land \#(x_1)=1 \land RUN-COME(e_1) \land x_1=Th(e_1)]

K_1+(2b)=[x_1 \ e_1 \ | DOG(x_1) \land ATM(x_1) \land \#(x_1)=1 \land RUN-COME(e_1) \land x_1=Th(e_1)

y \ e \ x \ | y=SPKR \land x=x_1 \land y=Ag(e) \land PET(e) \land ATM(e) \land \#(e)=1 \land DOG(x) \land x=Th(e)]
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The identification of x with x_1 is strengthened by certain discourse features: the anaphoric definite reading of the PI-BNP is strengthened if it is a continuing topic in subsequent utterances, or if there is overt marking of temporal/logical sequence of events (jiù), which may be analyzed as event-sequence markers.

DISCUSSION. 1. The analysis of the event-dependency of PI nominals in (5a) can be seen as an improvement upon Krifka & Modarresi's (2016): here number-neutrality is accounted for by appealing to a representational distinction for number/cumulativity, plus a condition that correlates sub-events with instantiations of PI nominal reference, thus eliminating the K&M's need for new "\(\exists^{\text{"}}\)" operator, which is rather contrary to the original DRT's inclination toward suppressing dedicated quantificational operators.

- 2. The availability of definiteness in PI-BNPs in cases like (2b) is crucially *not* due to covert raising out of ν P. The interpretation of BNPs raised out of ν P (via the $b\check{a}$ -construction) is event-independent: the availability of definiteness is not constrained by event-internal properties.
- 3. *Pace* Jenks (2018), the data here shows that uniqueness definiteness does not stand in complementary distribution to anaphoric definiteness in the case of Mandarin.

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