The distribution of wide scope indefinite bare duals in Kazym Khanty: a QUD-based approach

Overview. Bare NPs in articleless languages are commonly known to be unable to get wide scope indefinite interpretation (Dayal 2004; Deal & Nee 2018; Srinivas 2021, a.m.o.). Traditionally, this limitation is explained in semantic terms: depending on a particular theory, the lack of the wide scope indefinite reading is explained either by the definiteness of the bare NP or by its frozen narrow scope. The data from Kazym Khanty (<Uralic) provide a challenge to this view, for two reasons. First, contrary to the predictions, bare NPs with dual number in this language can get wide scope indefinite interpretations. Second, in certain cases, the wide scope indefinite interpretation of bare duals is unavailable, as in other articleless languages, but the nature of the limitation is clearly not semantic. In my paper, I will address these challenges by arguing that the limited distribution of the wide scope indefinite bare duals in Kazym Khanty follows from an independently established pragmatic constraint. Namely, I will argue that the wide scope indefinite readings of the bare duals in Kazym Khanty are always semantically available, but bare NPs cannot get wide scope indefinite readings when they address a quantity-oriented QUD.

Puzzle. Kazym Khanty has three numbers (singular, plural, and dual) and does not have articles, and bare NPs can be interpreted as both definites and indefinites (Tiutiunnikova et al. 2024).

(1) <u>ewi</u> pa <u>aj_iki</u> χot jit-a λuŋ-s-əŋən.
girl ADD boy house room-DAT enter-PST-DU
ewi **aj_ikij-a** păsan-a oməs-ti lup-əs
girl boy-DAT table-DAT sit-NFIN.NPST say-PST[3SG]
'<u>A girl</u> and <u>a boy</u> entered a room. **The girl** told **the boy** to sit at the table.' (ibid.)

Bare dual NPs are used when the number of individuals satisfying the NP equals two.

(2) kam-ən ńawrɛm-ŋən juŋ-λ-əŋən
street-LOC child-DU play-NPST-3DU
'Exactly two children are playing in the street.'

Contrary to the theoretical expectations, bare NPs in Kazym Khanty, bare duals in particular, can get a wide scope indefinite interpretation, as shown in (3). The provided context is compatible only with the wide scope indefinite interpretation of the bare dual *ewɛŋən* 'two girls' with respect to negation. It is true that there are two (non-unique) girls who are not sleeping, but it is not true that there are no (two) girls who are not sleeping.

(3) *In a camp, two of ten girls cannot sleep. The consulor Vasya was asked to talk to the two non-sleeping kids, but he did not know the gender of the two children. Assuming those are boys, he takes soldier toys with him to play with the kids. On his way to the dorm, he meets a nurse who tells him:*
was'a, ewɛ-ŋən ănt uλ-λ-əŋən, akań wuj-a
V. girl-DU NEG sleep-NPST-3DU doll bring
'Vasya, GIRLS are not sleeping, bring the dolls (instead).'

At the same time, there are cases when wide scope indefinite reading is unavailable, in line with the theoretical expectations. For instance, the sentence in (4) is infelicitous in the given context that forces the wide scope reading of the bare dual *ewɛŋən* 'two girls'. Note that the clause with the bare dual in (4) is identical to the one in (3), which suggests that the accessibility of the wide scope reading for the bare dual is sensitive to the context in which the sentence was uttered.

(4) *Masha works in the child summer camp, and his job is to check whether people are sleeping after midnight. There are 10 girls and 10 boys at the camp, and tonight, two girls were not sleeping. When her boss asked her "Are all the children sleeping?", she answered:*
#antə, **ewɛ-ŋən** ănt uλ-λ-əŋən
NEG girl-DU NEG sleep-PST-3DU
Intended: 'No, two girls are not sleeping.'

Proposal. I argue that the wide scope reading of bare duals is freely available semantically, and the limited distribution of wide scope indefinite bare duals can be explained independently within a QUD-based approach (Roberts 1996 et cq.; Simons et al. 2010). Namely, I will argue that bare duals cannot get wide scope indefinite readings when they would address a quantity-oriented QUD, because the semantics of the dual number is not-at-issue content.

There are several pieces of evidence showing that the only at-issue content bare duals feature is the nominal property, not the duality meaning of the dual number. First, bare duals can be used to address a property-oriented question (5a), but not the quantity-oriented question (5b). Second, bare duals can get narrow focus when the focus alternatives differ in the nominal property, but not when they (also) differ in terms of the quantity of the individual. For instance, the sentence in (6) can be uttered to contrast girls with the boys (6a), but not to contrast two girls with the rest of the children (6b).

(5) {a. Who is playing outside?}
{b. #How many children are playing outside?}

kam-ən	**ńawrɛm-ŋən**	jun-λ-əŋən
street-LOC	child-DU	play-NPST-3DU

'**Children (two)** are playing outside.'

(6) a. Scenario 1. There were two boys and eight girls. Only the (two) girls came to the lecture.
b. *Scenario 2. There were eight boys and eight girls. Only two of the girls came to the lecture.

ma	χuś-am-a	ewɛ-ŋən	təp	oməs-λ
I	at-POSS.1SG-DAT	girl-DU	only	sit-NPST[3SG]

'Only **two girls** are sitting in my class.'

I argue that it is the inability of bare duals to address a quantity-oriented QUD as in (4b) and (5b) that causes the infelicity of the sentence in (4). Namely, since the duality implication of the dual number is not-at-issue content, the only content of the clause with the bare dual *ewɛŋən* 'two girls' in (4) visible for the QUD is 'the person who is not sleeping is a girl'. Hence, the QUD that gets accommodated is 'Whoever is not sleeping, do they belong to the set of girls or to the set of boys?', which is a pragmatically odd question in the provided context: the natural QUD in (4) is quantity-oriented.

In contrast, the sentence in (3) addresses a property-oriented QUD. Namely, since the intention of the speaker is to highlight that those who sleep are not boys but girls, the implicit QUD the hearer accommodates is 'What kind of children are not sleeping?'. Bare duals can contribute to addressing this QUD since it targets their at-issue content, that is, the property of the individuals in question, so the sentence in (3) is felicitous.

The QUD-based analysis predicts that bare duals should also be able to recieve wide scope indefinite readings in sentences that address more broad QUDs. This prediction is borne out. For instance, in (7), the speaker's implicit QUD is 'What is going on in the room?'. The use of a wide scope indefinite bare dual NP is felicitous, since the number of the children who are not sleeping is not relevant.

(7) *Masha's new job is to take care of a group of ten children. This night, two of them are not sleeping. She calls her more experienced friend and asks:*

was'a	ma	χuś-am-a	ńawrɛm-ŋən	ănt	ʉλ-λ-əŋən,	muj	wɛr-ti?
V.	I	at-POSS.1SG-LOC	child-DU	NEG	sleep-NPST-3DU	what	do-NFIN.NPST

'Vasya, in my room (lit. at me), children (two) are not sleeping, what should I do?'

Conclusion. The presence and the pragmatically limited distribution of wide scope indefinite bare duals in Kazym Khanty is challenging for the classic approaches to the nominal meanings, according to which wide scope indefinite readings of bare NPs are inaccessible for the semantic reasons. In contrast to that, I argue that in Kazym Khanty, the wide scope indefinite interpretation is always semantically accessible for bare duals, and the limited distribution is explained by an independent pragmatic constraint: bare duals cannot be used to address a quantity-oriented QUD.

The proposed QUD-based account for the limited distribution of wide scope indefinite bare duals in Kazym Khanty is important for the general theory of meaning because it shows that what has been typically analyzed as a semantic constraint — the accessibility of the wide scope indefinite reading — can (at least in some languages) be explained by an independently established pragmatic constraint.

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