Anaphoric variability in Kannada bare nominals

SADHWI SRINIVAS¹, Johns Hopkins University Kyle Rawlins², Johns Hopkins University

Abstract

Though Kannada bare nominals are commonly used in contexts where they behave like definite descriptions, the definite reading of the bare noun is unavailable (or highly dispreferred) in certain anaphoric environments despite the presence of a suitable antecedent. In this paper, we observe that these are usually contexts where it is unclear whether the sentence topic contains the intended referent. We formalize this characterization within a situational-uniqueness based account for definiteness, and explain the limited uses of anaphoric bare definites as an interaction between this view of definiteness and an ambiguity analysis of the Kannada bare noun wherein they are capable of denoting kinds/indefinite entities as well, in addition to definites.

1 Introduction

One common way of expressing definiteness in Kannada, a *determinerless* Dravidian language, is to use the bare nominal—as shown in (1)-(2) below. In this, Kannada is similar to several unrelated languages that have been identified as containing bare nominal definites: e.g., Hindi (Dayal 1992, 1999, 2004, *i.a.*), Mandarin (Jenks 2018), Thai (Jenks 2015), Korean (Ahn 2017, 2019), Turkish (Despić 2019) and Japanese (Kurafuji 2004), among others. In general, the referent picked out by the Kannada bare definite may be uniquely identifiable as a result of being unique in the larger/immediate context as in (1), or as a result of being anaphoric to a previously mentioned antecedent, as in (2).

- (1) **Suurya** iDii dina hora-ge band-illa. Sun all day outside-DAT came-NEG "The sun did not come out all day."
- (2) Nenne naan-ondu gi Li_k -anna nooDide. **giLi_k** mara-dalli gooDu kattikonDubiTTittu. Yesterday I-one parrot-ACC saw parrot tree-LOC nest had.built "Yesterday I saw a parrot. The parrot had built itself a nest on the tree."

However, this generalization is complicated by the observation that in some cases, the definite reading of the bare noun fails to arise despite the presence of a suitable antecedent. An indefinite reading is instead preferred in the episodic context in (3), while in (4), a generic reading is obtained.

- (3) Nenne Abhinav ondu ili-anna nooDida. Ivattu, room-alli **ili** ooDaaDta ide. yesterday Abhinav one mouse-ACC saw today room-LOC mouse roaming COP "Yesterday, Abhinav saw a mouse. Today, a/#the mouse is roaming around in the room."
- (4) Nenne Abhinav ondu ili-anna nooDida. Avan-ige ili kanDre tumba bhaya. yesterday Abhinav one mouse-ACC saw He-DAT mouse towards very fear "Yesterday, Abhinav saw a mouse. He is very afraid of mice/#the mouse."

The data in (3)-(4), though puzzling, are in line with recently reported data from other languages containing bare nominal definites which also note limited uses of the item in anaphoric contexts. For instance, Jenks (2018) notes that in Mandarin, the anaphoric bare nominal is infelicitous in object position—an additional demonstrative item must be used, as shown in (5):

(5) a. Jiaoshi li zuo-zhe yi ge nansheng he yi ge nüsheng. classroom inside sit-PROG one CLF boy and one CLF girl

¹sadhwi@jhu.edu

²kgr@jhu.edu

"There are a boy and a girl sitting in the classroom."

- b. Wo zuotian yudao #(na ge) nansheng.
 - I yesterday meet that CLF boy
 - "I met the boy yesterday."

Similarly, Despić (2019) notes for Turkish that the bare nominal—usually capable of functioning as an anaphoric definite—seems to lose this ability with mass nouns, as shown in (6). In this example, the bare noun in (6-b) must receive a kind reading. A similar observation also holds for Serbian.³

(6) a. Ömrum boyünka üzüm yetiştirdim. my.life throughout grape produce
"I have been producing grapes my whole life."
b. meyve herşeyim oldu. fruit my.everything became

"Fruit/#The fruit is everything to me."

In this paper, we zoom in on the Kannada bare noun data, with the goal of arriving at an explanation for the anaphoric variability observed in its definiteness uses. We first discuss explanations that have been previously proposed by authors such as Jenks (2018), Ahn (2019) and Despić (2019) to account for similar phenomena in other languages. We argue that these accounts cannot be extended to the Kannada data for both theoretical and empirical reasons. We will instead propose an alternative account that relies on a specific situational-uniqueness based view of definiteness (building upon the analysis in Schwarz 2009), and the interaction of this view of definiteness with the inherent ambiguity of the Kannada bare noun (wherein it has kind and non-specific indefinite interpretations in addition to definite). In particular, we posit that in the absence of a unique referent within a certain *preferred* situational domain (the *topic situation*; Austin 1950), the definite reading of the bare noun is discarded in favor of more readily available alternative (indefinite/kind) readings.

The remaining sections are organized as follows. Section 2 introduces the reader to the Kannada bare nominal in more detail, establishing the kind and narrow-scope indefinite readings of the bare noun apart from its definite reading. We will find that the properties of the Kannada bare nominal closely resemble the bare noun in Hindi as analyzed by Dayal (1992, 1999, 2004). Section 3 elaborates on the main puzzle already introduced above in (3), giving more examples of unexpected contexts in which the definite reading of the anaphoric bare noun fails to arise. In Section 4, we consider some existing proposals in the literature to account for this phenomenon, before developing our own proposal in Section 5. Section 6 briefly discusses a couple of open questions, and concludes.

2 The various uses of the Kannada bare nominal

We have already seen in (1)-(2) that bare nominals in Kannada can have definite readings in (larger or immediate) uniqueness contexts (Russell 2005, Roberts 2003, Evans 1977), as well as in anaphoric contexts (Heim 1982, Kamp 1981). In both cases, the bare nominal picks out a uniquely identifiable referent. As further proof of the definiteness of the bare nominal, we note that they may also felicitously occur in "donkey sentences" like in (7), patterning with standard anaphoric definites.

³Such observations pertaining to the limited uses of anaphoric bare nominals have prompted some researchers to adopt an analysis for definiteness in these languages analogous to Schwarz (2009)'s proposal for German: bare nominals are taken to be uniqueness-denoting definites akin to the weak determiners in German, and demonstrative descriptions are taken to be anaphoric definiteness markers akin to German strong determiners. Even in Kannada, in all the examples where we observe a dispreference for bare nominals, the preferred way to achieve anaphoric reference is by using a demonstrative description. However, we remain agnostic in this paper about whether such a dichotomous analysis is suitable for Kannada, focusing instead only on the definiteness of the bare nominal.

 (7) KatteyuLLuva pratiyobba raita katte-ge ooTa haaktaane. donkey.having every farmer donkey-DAT food gives
 "Every farmer who has a donkey feeds the donkey."

In addition to the definite reading, the bare noun is also associated with kind/generic readings. They are capable of appearing with kind-level predicates as in (8). Generic readings may arise in out-of-the-blue habitual contexts and with individual-level predicates, as shown in (9)-(10) respectively.

- (8) Naayi ondu saamanya-(v)aada praaNi.
 Dog one common-COP animal "The dog is a common animal."
- (9) **Naayi** bogaLatte. Dog barks "The dog barks."
- (10) **Naayi-ge** mooLe kanDre bahaLa ishTa. Dog-DAT bone towards very like "Dogs really like bones."

Moreover, (11) below shows that Kannada bare nominals can also have indefinite interpretations:

(11) Room-alli **ili** ooDaaDta ide Room-LOC mouse roaming COP.PRS "There is a mouse roaming in the room."

A notable property of the indefinite uses of Kannada bare nouns is that they are limited to narrowscope only—no wide-scope indefinite interpretations are allowed. For example, in (12)-(13) containing negation and an intensional operator respectively, the indefinite bare noun must scope under these operators. In this paper, we take this characterization of the Kannada indefinite bare nouns for granted, and note that it closely resembles what Dayal (1992, 1999, 2004) claims of indefinite bare nouns in Hindi as well. However, we also note that claiming there are no wide-scope indefinite readings of the Kannada bare nominal contradicts a previous view endorsed in Lidz (2006).⁴

- (12) Room-alli ili illa. Room-LOC mouse COP.NEG "It is not the case that there is a mouse in the room."
- (13) Zoo-alli huli-anna nooDalu bayasutteene. Zoo-LOC tiger-ACC to.see wish.1.sG "At the zoo, I wish to see a(ny) tiger."

Finally, Kannada bare nouns may also have predicative uses, as shown in (14).

(14) Moti naayi aadroo bekkina haage aaDatte. (Tanna.paaDi-ge taanu kootiratte.) Moti dog being.still cat.GEN like behaves (its.own.self-DAT it sits)
"In spite of being a dog, Moti acts like a cat. (It keeps to itself.)"

This brief introduction to the Kannada bare nominal suffices to establish its versitality and ubiquity within the language. We will now turn our focus to the question of what it is about the bare noun in Kannada that limits its definiteness uses in anaphoric contexts.

⁴In particular, Lidz discusses the behavior of Kannada bare singular objects in the context of differential object marking, arguing for how morphology and syntax separately determine the availability of wide- vs. narrow-scope readings for these objects. However, it can be shown that all so-called wide-scoped readings discussed by Lidz are in fact instances of definiteness. See Srinivas and Rawlins (to appear) for arguments that this is indeed the case.

3 Digging deeper into the data

The main puzzle of interest to us here has already been illustrated in (3), repeated in (15), where the definite meaning of the bare nominal is highly dispreferred despite the presence of a unique, suitable antecedent. Note that the English translation indicates that the definite determiner can be used to convey the definite meaning, so this phenomenon seems to be specific to the bare nominal.

(15) Nenne Abhinav ondu ili-anna nooDida. Ivattu, room-alli **ili** ooDaaDta ide. yesterday Abhinav one mouse-ACC saw today room-LOC mouse roaming COP "Yesterday, Abhinav saw a mouse. Today, a/#the mouse is roaming around in the room."

A possibly fruitful way to rephrase this puzzle is to ask what exactly is different between (15) vs. the utterance in (2) which offers an anaphoric context that doesn't strip the bare nominal of its definite reading. Though the anaphoric bare noun is the subject in both cases, one difference we might note is that the subject appears in sentence-initial position in (2), but not in (15). In fact, when we switch the words around such that the anaphoric bare noun appears sentence-initially in $(15)^5$ —this variant is shown in (16)—the definite reading is now suddenly more accessible.

(16) Nenne Abhinav ondu ili-anna nooDida. Ili ivattu room-alli ooDaaDta ide. yesterday Abhinav one mouse-ACC saw mouse today room-LOC roaming COP "Yesterday, Abhinav saw a mouse. Today, the mouse is roaming around in the room."

We further note that word order seems to make a difference to the accessibility of bare nominal's (in)definite reading in Kannada even in non-anaphoric contexts. In sentences like (11) uttered out of the blue, reproduced below in (17), the bare singular is interpreted as a non-specific indefinite; this contrasts with the minimally different (18), where the definite interpretation is preferred.

- (17) Room-alli **ili** ooDaaDta ide Room-LOC mouse roaming COP "There is a mouse roaming around in the room."
- (18) **Ili** room-alli ooDaaDta ide Mouse room-LOC roaming COP "The/??A mouse is roaming around in the room."

The observation that the definite reading of the bare nominal may be unavailable (or dispreferred) even in non-anaphoric contexts is somewhat surprising in the light of our earlier characterization of the puzzle—following previous authors such as Jenks (2018) and Despić (2019)—as being limited to anaphoric bare nouns. In fact, from the data seen so far in this section, we might wonder whether the more appropriate question to pose concerns the influence of word order on the interpretation of the bare nominal, regardless of whether or not it is anaphoric.⁶ However, reflecting a bit more upon the data reveals that word order is one among several other factors that seem to matter. In the remainder of this section, we identify three additional factors that modulate the availability of definite readings in Kannada anaphoric bare nominals. Any proposal that claims to address limited use of anaphoric bare nouns must provide a satisfactory, theoretically-motivated answer for why these seemingly disparate factors must matter for the definite interpretation of the bare nominal.

The first of these factors has to do with the descriptive form of the anaphoric bare noun. We observe that the definite reading of the anaphoric noun in (2) is hindered when its descriptive content (*sundaravaada hakki*; "beautiful bird") is no longer identical to the introductory mention of the intended referent (*giLi*; "parrot"), as shown in (19).⁷ Once again, notice that the anaphoric

 $^{^{5}}$ It is possible to do this grammatically in Kannada, a language that widely allows scrambling.

 $^{^{6}}$ See also van der Does and de Hoop (1998), who note a correlation between word order and definiteness.

 $^{^{7}}$ A similar observation is made by Schwarz (2009) for German, where the weak determiner is infelicitous in anaphoric contexts if the descriptive content of the noun varies between the antecedent and the anaphoric mention, even if

reading is available in the English translation, so the issue is specific to the bare nominal definite.

(19) Nenne naan-ondu giLi_k-anna nooDide. sundaravaada hakki_k mara-dalli gooDu Yesterday I-one parrot-ACC saw beautiful bird tree-LOC nest kattikonDubiTTittu. had.built "Yesterday I saw a parrot. A/??The beautiful bird had built itself a nest on the tree."

Next, we observe that the strength of context that precedes the anaphoric mention of an entity can also modulate the availability of the definite reading of the bare nominal. For instance, adding more context regarding the mouse in (17), as shown in (20), enhances availability of the definite reading:

- (20) a. <u>Context</u>: Yesterday, I saw a mouse in the kitchen. The mouse was so cute that everyone fell in love with it. We are even thinking of adopting it. But, the mouse is really naughty!
 - b. Ivatu, roomalli **ili** rampa harDide. Today room.in mouse mess spread "Today the mouse has messed up the room."

Finally, we note that the definite reading of the bare noun is also hindered when there is a mismatch between (the spatio-temporal address of) the situation in which the entity was introduced, and the situation in which it is re-mentioned using the bare noun. Moreover, greater the unpredictability/arbitrariness with which such a shift is implemented, greater the oddness of the anaphoric bare definite. For example, in (21), the bare definite sounds considerably odd. The infelicity seems to arise from the explicit spatio-temporal shift between the first and second sentences. Contrast this with the significantly improved use of the bare noun definite in (22) where the shift in the situation is more predictable, and with the fully felicitous case in (23) where no such shift occurs at all.

- (21) Nenne park hattra nana-ge ondu bekku kaaNisitu. Mooru varsha-da hinde namma Yesterday park near I-DAT one cat was.seen Three years ago our mane-alli bekku mari haakittu. house-LOC cat kids had.given 'Yesterday, I saw a cat near the park. Three years ago in our house, a cat/??the cat had given birth to some kittens.'
- (22) Nenne park hattra nana-ge ondu bekku kaaNisitu. Ivattu **bekku** mari haakittu. Yesterday park near I-DAT one cat was.seen today cat kids had.given 'Yesterday, I saw a cat near the park. Today, the cat had given birth to some kittens.'
- (23) Nenne park hattra nana-ge ondu bekku kaaNisitu. **Bekku** mari haaktittu. Yesterday park near I-DAT one cat was.seen cat kids was.giving 'Yesterday, I saw a cat near the park. The cat was giving birth to kittens.'

To sum up, we have identified four concrete factors that modulate the availability of the definite reading in Kannada bare nouns. A question that naturally arises is this: is there a common explanation behind the distinct factors identified above? If there is one, what is the best way to characterize it? We take up this question in more detail in Section 5, where we propose that the driving explanatory factor is related to correctly identifying the referential domain within which the definite is intended to be interpreted. Before this, in Section 4, we consider some existing proposals that have also tried to address the limited definite readings of anaphoric bare nouns in other languages.

uniqueness is satisfied within the context. Using the strong determiner instead is claimed to repair the utterance.

4 Previous approaches

Below, we discuss a few existing explanations for the limited anaphoric uses of bare noun definites across languages, and evaluate their generalizability to explaining the Kannada data.

4.1 Jenks 2018

Jenks (2018) reports a categorical restriction in Mandarin wherein the definite interpretation of the anaphoric bare noun is possible only in those utterances where the noun appears as the Subject (which also happens to be the Topic position in Mandarin). To account for this restriction, he proposes a novel *Index!* constraint as defined in (24). In contexts where an indexed anaphoric antecedent is available, *Index!* forces the use of the demonstrative that binds this index and disallows the bare noun—thus effectively reducing the bare noun to an "elsewhere" definite. However, this constraint selectively exempts subject-position bare nouns, since, the "pragmatic function of topic marking overrides and neutralizes the effect of *Index!* in such environments".

(24) *Index!*: Represent and bind all possible indices.

One main issue in trying to extend this analysis to Kannada is that *Index!* is stated as a very strong, categorical constraint, however the Kannada data on anaphoric bare nominals seems much more permissive. For instance, (25) below shows that anaphoric bare nominals in object positions can sometimes receive definite interpretations in Kannada. We also know from (15) that simply being the subject does not guarantee the definite reading of the anaphoric bare nominal.

(25) Nenne avaL-ige ungura koDiside. Ivattaagalee ungura kaLedubiTTidaaLe. Yesterday she-DAT ring bought.1.SG today.already ring she.has.lost "Yesterday, I bought her a ring. Already today, she has lost the ring somewhere."

Jenks' generalization regarding the Mandarin data itself has also more recently been called into question. Dayal and Jiang (2020) give several examples drawn from a Chinese language corpus to show that non-subject anaphoric bare nouns may be interpreted as definites in several contexts. Moreover, *Index!* predicts that the demonstrative is to be preferred over the bare noun for anaphoric mentions of globally unique entities in object position, but as Dayal and Jiang (2020) note, the Mandarin data directly contradicts this prediction: demonstrative determiners are always infelicitous with globally unique entities. A similar observation holds for Kannada as well:

(26) Nenne surya jooraagi hoLiyuttittu. Ivattu, naanu (#aa) surya-nna nooDee.illa. Yesterday sun brightly was.shining today I (that) sun-ACC have.not.seen "Yesterday, the sun was shining brightly. Today, I've still not seen the/#that sun."

Finally, the interaction between the subject bare noun with *Index!* also seems fairly stipulative— Jenks does not discuss a principled reason for why subject nouns should be immune to the constraint.

4.2 Ahn 2019

In her 2019 dissertation, Ahn proposes the "Bare Noun Blocking Generalization", according to which those languages that have morphologically *simplex* pronouns—e.g., Hindi, Thai and Lugwere—are the ones that disallow anaphoric uses of bare nouns. *Simplex pronouns* are defined as those pronouns that can stand alone without the NP and refer anaphorically: for example, the pronouns *he*, *she*, and *it* in English would qualify as simplex pronouns.

Here, we note that such a generalization proves to be too strong for Hindi and Thai. For instance, Jenks (2015) notes that Thai allows anaphoric bare nouns in certain contexts, depending

on whether uniqueness has been "clearly established".⁸ Even the Hindi data reported by Ahn aren't very convincing—she notes that the judgements regarding the infelicity of bare nominals in anaphoric contexts are not shared by two of the five of her Hindi language consultants. In Kannada as well, which does consist of simplex pronouns as per the definition in Ahn (2019), Ahn's generalization does not anticipate contexts like (2) in which bare definites can and do occur felicitously. The main issue with this proposal then seems to be that it issues a blanket ban on anaphoric uses of bare noun in languages with simplex pronouns. However, as seen from the data in Sections 1-3, the actual distribution of the bare definite in anaphoric contexts in Kannada is much more nuanced.

4.3 Despic 2019

Despic (2019) observes that in several determinerless languages (he specifically considers Serbian, Turkish, Mandarin, Japanese and Hindi), definite interpretations of anaphoric bare nouns are dispreferred due to the existence of an alternative kind reading in non-episodic, individual-level contexts. So far, this is not so different from what we have seen in Kannada—in a non-episodic anaphoric context like in (4), a kind reading may be preferred over the definite reading. However, Despic makes a more specific generalization: the kind reading blocks the definite reading only in mass/pluraldenoting nouns, but not in singular count nouns. For example, the singular count noun *kitap* ("book") refers to the antecedent *Crime & Punishment* in the Turkish example in (27), but the mass noun in (28) cannot refer to the previously mentioned antecedent; only a generic reading is possible.

(27) Dün "Şuc ve Ceza" okudum – kitap harikaydi. yesterday "Crime and Punishment" read-PST – book terrific-PST "Yesterday, I read *Crime & Punishment*. The book was terrific."
(28) Ömrum boyünka üzüm yetiştirdim. meyve herşeyim oldu. my.life throughout grape produce fruit my.everything became "I have been producing grapes my whole life. Fruit/#the fruit is everything to me."

To explain this data, he draws upon the analysis for singular vs. plural/mass bare nouns in Dayal (2004), wherein the latter allow type-shifting using the intensional nom operator (Chierchia 1998) in addition to *iota*, but the former are only subject to type-shifting via *iota*. In kind-denoting contexts, the possibility of type-shifting via nom in mass/plural nouns is said to block the definiteness (*iota*) reading. No such blocking can occur in singular count nouns where nom is not a possibility.

However, there are several issues in extending this account to Kannada—both empirical and analytical. The empirical issue is that the generalization simply does not hold in Kannada, as the definite readings of anaphoric singular count nouns are also often dispreferred in favor of kind readings in non-episodic contexts, as seen in (4) with the singular noun *ili* ("mouse"). Moreover, the definite reading of the bare singular fails to arise in all sorts of other episodic contexts as well, as seen in Section 3, and an analysis which solely relies on the competition with kind readings analysis cannot explain these instances. Analytically, it is not clear why the availability of *nom* in plural/mass nouns should block *iota* at all. According to the ranking of type-shifts in Dayal (2004) followed by Despic, *nom* does not dominate *iota*: they are ranked equally at the highest level.

4.4 Dayal 2004

The Hindi bare nominal data given in (29)-(30) demonstrate that Hindi closely resembles Kannada in terms of the contexts in which the bare nouns receive definite vs. indefinite readings.

⁸Jenks does not offer a more precise characterization of what it takes for uniqueness to be clearly established, but based on his examples, it is likely that this correlates with how well the domain of the discourse has been delimited.

(29) kamre mein **cuuhaa** hai room in mouse is "There is a mouse in the room."

(30) Kal main-e rasooii mein ek cuuha dekhaa. Aaj kamre mein **cuuhaa** hai. Yesterday I-ERG kitchen in one mouse saw today room in mouse is "Yesterday, I saw a mouse in the kitchen. Today, a/#the mouse is in the room."

Dayal (2004) characterizes the contexts in which indefinite readings of the bare singulars arise as those contexts in which the entity referred to by the bare nominal is *not salient*. At various points in the paper, she notes that an entity is non-salient when it is either "not firmly established in the common ground", "not the primary focus of interest" or "not likely to be referred to in subsequent discourse".⁹ However, such an explanation cannot be useful unless the notion of salience that is relevant to the interpretation of the bare nominals is characterized more precisely. Put differently, more needs to be said about the sense in which the mouse in (30) is not salient, such that it cannot be referred to by the anaphoric bare noun—especially as it was explicitly introduced into the discourse context not too long ago. Moreover, why doesn't the alleged non-salience of the mouse prevent the English determiner from referring to it just as it prevents the Kannada bare nominal from doing so?

But despite these puzzles and despite the difficult task of defining the notion of salience, we believe that this idea is essentially on the right track. In Section 5, we define a particular idea of salience as being relevant to the interpretation of (anaphoric) bare definites in Kannada: an entity is *non-salient* iff it cannot be presupposed within the sentence's topic situation. We will contend that this characterization can help explain why the factors identified in Section 3 such as the sentence-initial position of the bare nominal or the strength of the context around the intended referent should make a difference to the bare nominal's definite interpretation. The differences in distribution of the Kannada bare definite *vs.* the English definite determiner are explained as a consequence of competition with the additional kind/indefinite readings in the bare nominal.

5 A new proposal

In §5.1, we propose an alternative explanation for the limited definiteness uses of the Kannada bare noun The discussion in §5.2 demonstrates that this proposal helps tie together in a principled way factors that were noted in Section 3 to influence availability of the definite reading.

5.1 The Topic Situation as preferred domain restriction

As part of explaining the limited availability of definite readings in Kannada anaphoric bare nouns, we adopt a version of the uniqueness theory of definiteness which involves a situational domain restriction (Barwise 1981, Barwise and Perry 1983). The idea of a situational domain restriction is not by itself new. For example, Schwarz (2009) uses situations in analyzing the German weak determiner; see also Elbourne (2001), von Fintel (1994), Wolter (2006) among others. Under Schwarz's theory of situational-uniqueness for the German weak determiner, it is assumed that any contextually salient situation, one among which is the Austinian *topic situation* (Austin 1950), is equally available to act as the domain restrictor. That is, it is sufficient for uniqueness to hold in any one of these situations for the definite description containing the uniqueness-denoting German weak determiner to be licensed. Here, we depart from Schwarz by assuming that not all situations are equally preferred in the role of the domain restrictor. Specifically, we take the definite expression to be preferably resolved to entities known to be unique in the topic situation—i.e., the situation that the sentence is *about*. Once again, this move is not unprecedented. There is some existing

⁹The mechanism by which the indefinite reading arises is via *iota*, however where *iota* presupposes uniqueness but not familiarity/salience. Consequently, salience leads to definite readings, non-salience leads to indefinite readings.

evidence that the topic situation is in fact privileged. For example, MacKenzie (2012) proposes that the phenomenon of *Switch Reference* in Kiowa and other native American languages tracks topic situations, such that different markers are used when the topic situation shifts between sentences of the discourse vs. when no such shift occurs (see also Frazier and Clifton 2018, Schwarz 2019). However, such a preference for the topic situation does not completely preclude the consideration of other contextually salient situations as potential domain restrictors—they are simply less preferred. In the absence of uniqueness in the topic situation, other salient situations may be considered as back-off alternatives.

With these assumptions in place, we are now in a position to account for the limited definite readings of Kannada bare nominals. We propose that the availability of the definite reading for the bare nominal is dependent on how confidently one can presuppose that the intended referent is indeed a unique part of the topic situation. As mentioned above, in the absence of such a referent, it is possible in principle to look for uniqueness in other less-preferred contextually salient situational domains to resolve the definite description—and indeed, this is what happens in the case of English definite descriptions, where the determiner can only be interpreted as indicating definiteness (at least in episodic contexts).^{10,11} But things work differently in Kannada, where the bare nominal can have alternative kind/indefinite interpretations (which are available in non-episodic and episodic contexts respectively, in addition to definite readings). Due to competition that arises among these alternative readings, we propose that the definite interpretation only wins when uniqueness of the referent can be presupposed in the topic situation. If it is unclear that this is the case, then the definite reading becomes dispreferred—and the alternative kind/indefinite readings take over, presumably because backing off to less preferred referential domains to compute definiteness is more expensive than backing off to readily available kind/indefinite readings.

5.2 Determining the topic situation in a given context

To determine whether a referent exists uniquely in the topic situation in a given discourse context, the identity of the topic situation must first be established. The goal of this subsection is to reinterpret the four factors identified in Section 3—namely, word order, strength of context around the intended referent, spatial/temporal shifts within the discourse context, and the form of the nominal descriptor—as being cues towards determining the identity of the topic situation.

First, we note that the spatio-temporal location of the sentence, as indicated by frame-setting adverbials or tense/aspectual marking within the sentence, provides a clue towards identifying the topic situation associated with that sentence (see also Frazier and Clifton 2018 and Schwarz 2019 for similar ideas). Assuming that every situation is located in space and time, we can reasonably say that the situation that the sentence is about is set in the time and place indicated in the sentence. For instance, (31) is understood as describing a situation that occurred yesterday in the park:

(ii) Nana-ge huli kanDre bhaya.
 I-DAT tiger towards fear
 'I am afraid of tigers' (kind reading ✓)

That said, we do note that in contexts when there is in fact a competing kind reading for the English anaphoric definite, the definite reading does become dispreferred. See (iii) uttered in the context of an animal safari: (iii) Look, a lion is asleep under the tree! In school, we learned that **the lion** is the king of the jungle.

 11 A proponent of the ambiguity theory may say instead that the lack of anaphoric variability in English *the* is due to the presence of an additional anaphoric entry. We acknowledge this possibility here without endorsing or refuting

it, but note that the ambiguity theory would need to explain why a definite reading is blocked in (iii) in fn. 10.

¹⁰In non-episodic contexts, the English singular definite does sometimes receive a kind reading. However, its kind potential is marginal when compared to bare nouns in Kannada. For example, English singular definite objects don't usually give rise to kind readings, this is not so for the Kannada bare singular.

⁽i) I am afraid of the tiger. (kind reading ??)

(31) Yesterday, I saw a dog at the park.

(32) presents further evidence for the idea that definites are interpreted within the topic situations of the sentences in which they occur. The two definite descriptions in the final sentences of (32) are felicitous, despite the presence of more than one dog in the discourse context. However, in the sentence topic situations in which each occurrence of *the dog* is evaluated, there is a unique dog.

(32) Yesterday, I saw a dog₁ at the park. Today, I saw another dog₂ at the store. Yesterday, the dog_1 was friendly. But today, the dog_2 was quite aggressive.

In Section 3, we observed cases like (21) where a mismatch between the spatial/temporal location of the sentence in which a referent is introduced vs. the sentence in which it is re-mentioned hinders the definite reading of the anaphoric bare nominal. We now have the vocabulary to explain why this should be so. According to our proposal, the definite reading of the anaphoric bare nominal *bekku* ("cat") in (21) arises only if a unique cat may be presupposed in the topic situation located three years ago in the speaker's house. However, the hearer has no certain information that this is the case. The only cat that has been introduced to the hearer is the one that was seen by the speaker at the park yesterday. While there is a slight chance that the same cat that was at the park was in the speaker's house three years ago, this seems unlikely without further context. It is thus unclear that the antecedent cat may be presupposed in the topic situation of the sentence containing the anaphoric mention, therefore the definite reading is marginal and the indefinite reading is preferred. Accommodating the previously introduced cat as continuing to be present in the topic situation of the ensuing sentence is easier if the sentence is a natural progression of the previously introduced topic situation, as in (22), or if they are identical as in (23).¹²

To identify the topic situation more precisely, we adopt the idea (Schwarz 2009, Kratzer 2008, von Fintel 1994) that these situations "exemplify" answers to the Questions Under Discussion (QUDs; Roberts 2012). Informally, if a situation exemplifies the answer to a question, it contains all and only those entities that are essential to answering the question. For example, if a situation exemplifies the answer to A's question in (33), it contains John and the items in the yard that he manipulated in doing what he did, but crucially, it does not contain the items in the yard that he did not manipulate.

(33) A: What did John do in his yard?

Under such a QUD-based construal of the topic situation, the presence of an explicit QUD makes it quite a bit more straightforward to compute which entities are part of the topic situation exemplifying the answer to the QUD. For instance, if (33) were the explicit QUD within an ongoing discourse, we could at least presuppose that the topic situation contains John. We also assume that where possible, super- and sub-QUDs may be accommodated as immediately preceding the sentence containing the definite description in order to aid its interpretation. For instance, in a context where the sentence in (34) is uttered in response to (33), a hearer who is aware of the existence of a unique cherry tree in John's yard may accommodate the intermediate sub-question like in (35), which allows them to presuppose the cherry tree in the topic situation of the answer.¹³

- (34) B: He hung a birdhouse on the cherry tree.
- (35) (Implicit sub-QUD) Did John do anything to/near the cherry tree in his yard?

However, it is often the case within an ongoing discourse that the QUD is not explicit but implicit. Furthermore, as the discourse progresses, the implicit QUD keeps shifting from one utterance to

 $^{^{12}}$ This is reminiscent of Dayal and Jiang's (2020) generalization about the Mandarin anaphoric bare definite: it is dispreferred when there is a shift in context between the antecedent and anaphoric sentences.

 $^{^{13}}$ This example is a variant of an example given in Ch. 4 of Schwarz (2009). Schwarz discusses this example as an instance of a case where the referent may not be presupposed within the topic situation, and therefore must be interpreted within the contextually salient situation of the entire yard. Here, we suggest instead that the description may be interpreted with respect to a topic situation corresponding to an accommodated sub-QUD.

the next, and it is the job of the hearer to reconstruct the QUD at any stage in order to interpret a definite description at that stage. In reconstructing the implicit QUD between two consecutive utterances (say) U_1 and U_2 in an ongoing discourse, one cue comes from the prior context consisting of utterance U_1 plus other preceding utterances. In particular, the more context there is around an entity in the preceding context (recall that this is one of the four factors identified in Section 3 as affecting the definite interpretation of the bare nominal), the more likely it is for the QUD and consequently the topic situation to (continue to) be about that entity. The intuition involved is simple (see Riester 2019 for a similar idea), and illustrated in examples (36)-(37). The passage in (36) which builds up more context around the dog may be said to be *about* the dog. However the same cannot be said of the dog in (37), where it is unclear if there is any one entity the passage is about, since several entities are mentioned but with little context around them.

- (36) I saw a dog today. The dog was small, and looked terrified.
- (37) I saw a dog today. And later in the park, I saw a cat and a pretty blue butterfly.

The second type of cue towards reconstructing the implicit QUD comes from the information structure of the utterance that supposedly answers the QUD, i.e., U_2 . In particular, if U_2 has some previously introduced information topicalized, then it is likely that the QUD/sentence topic situation contains the topicalized material. Determining whether an entity is topicalized within an utterance can be somewhat language-specific, but is usually correlated with whether the entity appears in the subject position or otherwise sentence-initially. The sentence-initial position correlates cross-linguistically with the syntactic Topic, which in turn correlates with the sentence topic (Reinhart 1981, Frey 2004). This helps explain the observation that Kannada bare nouns which occur in sentence-initial positions are more likely to receive a definite interpretation—these nominals are explicitly indicated by the speaker as belonging within the topic situation.

Finally, we suggest that the constraints related to the form of the nominal descriptor should be derived from general pragmatic pressures and the role that they play in determining the topic situation. The competition that arises between various forms that could be used to denote an entity—including the general preference for continuing to use simpler forms to refer to a familiar entity—influences the hearer's inference of whether the entity being referred to using a particular form is a continuing topic. This preference is related to Horn's principle (Horn 1984), stated in (38):

(38) The use of a marked expression when a corresponding unmarked alternate expression is available tends to be interpreted as conveying a marked message.

Assuming that a previously mentioned, familiar entity is a semantically less marked referent than a hearer-new entity, it is expected that a speaker who wishes to refer to the previously mentioned entity will use an unmarked description to do so, contrary to what we see in (19), where the anaphoric bare nominal (sundaravaada hakki; "beautiful bird"), is more marked than the introductory mention (giLi; "parrot"). Given this expectation, the move to a more marked description signals to the hearer that the speaker may be intending to refer not to the previously mentioned entity but a new one, making it unlikely that the previously mentioned referent is still part of the sentence topic situation.

Thus, in this section, we have developed a new topic situation-based proposal for why anaphoric definite readings of the multiply ambiguous bare nominals are limited in Kannada in specifically the ways identified in Section 3. A similar limitation is not observed with English definite descriptions. We posited that this is because the lack of similar ambiguity in the English determiner precludes alternative (kind/indefinite) interpretations in cases where the referent may not be presupposed in the topic situation, and forces back-off to other contextually salient situations as the intended domain restriction.

6 Conclusion

Before closing, we would like to draw the reader's attention to two open questions. First, while we have focused in this paper on characterizing contexts that lead to the suppression of definite readings in the bare noun, we have not addressed the related question of what mechanism gives rise to the indefinite reading, once the context has been identified as such. This question is further complicated by the observation that the indefinite readings are restricted to narrow-scope, and thus cannot be explained via the existential type-shifting operation. Several researchers have tried to account for such readings in other languages: e.g., van Geenhoven (1998), Farkas and de Swart (2003), Dayal (2004) *i.a.* Further work is needed to determine which of these is most suitable for Kannada, but see Srinivas and Rawlins (to appear) for some related discussion.

The second question pertains to demonstrative descriptions in Kannada. Demonstratives behave like English definite determiners rather than bare nouns in not being limited with respect to definite readings in anaphoric contexts. One reason for this could be that demonstratives are associated with a different semantics altogether, possibly one that does not even rely on topic situations. However, another intriguing possibility is that this is for exactly the same reason as what we proposed for English, i.e., demonstratives (in their anaphoric uses) can receive definite interpretations due to the possibility of backing off to other non-topic, contextually salient situations, since they lack of inherent semantic ambiguity (unlike bare nominals). This possibility also needs further investigation.

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