Malay plurals and referentiality agreement

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1 Introduction

Two notable properties of plurals in classifier languages (incl. Malay)[1]

1. Exclusive reference to pluralities, to the exclusion of singularities (e.g. Rullmann and You 2006) (1).

2. Definite-like properties (e.g. Yang 1998; Kurafuji 1999; Nakanishi and Tomioka 2004) (2).

Mandarin

(1) a. Wang nüshi you *haizi*.
         Wang Mrs. have child
         'Mrs. Wang has a child/children.'
     b. Wang nüshi you *haizi-men*.
         Wang Mrs. have child-PL
         'Mrs. Wang has the children.'   (Lan 2010:19–20)

(2) a. You *ren*   lai-le.
         have person come-ASP
         'There is somebody coming.'
     b. *You *ren-men* lai-le.
         have person-PL come-ASP
         For: 'There are people coming.'   (Yang 1998:281)

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[1]Classifier languages have been said to lack genuine plural number morphology (e.g. Chierchia 1998). However, this is not the case. A language with a general classifier system can have plural morphology, as Chung (2000) and many others have shown. Moreover, I have claimed that their apparently "optional" use does not allow one to regard the relevant plural morphology as non-genuine number morphology (Nomoto 2013).

The goals of this paper

1. Point out that the definite-like properties of plurals are due not to definiteness but to referentiality.

2. Argue that the definite-like properties arise because plural markers must be licensed by referential determiners in D by means of agreement.

Organization

1. Introduction

2. Definite-like properties

3. Plurals are referential

4. Analysis

5. Beyond classifier languages

6. Conclusion

2 Definite-like properties

Main pieces of evidence for the definiteness of plurals

(i) cannot occur in existential/unaccusative sentences (2)

(ii) cannot serve as predicate nominals (3)

(iii) incompatible with generics (characterizing sentences) (4)

(iv) obligatory wide scope over intensional verbs (5)

Mandarin

(3) Tamen shi *xuesheng(*-men)*.
     they   be student-PL
     'They are students.' (cf. They are the students.)   (Yang 1998:280)

(4) *Yidaliren-men* hen kailang.
     Italian-PL   very cheerful
     *'Italians are cheerful.' (cf. The Italians are cheerful.)

(5) Na jia yiyuan zhengzai zhao *hushi-men.*
that CLF hospital currently look.for nurse-PL

  (i) *look.for > nurses
  'That hospital is looking for nurses (to hire).'

  (ii) √nurses > look.for
  'There is a group of nurses that hospital is looking for.'
  (cf. That hospital is looking for the nurses.)

  cf. Na jia yiyuan zhengzai zhao *hushi.*
  that CLF hospital currently look.for nurse

    (i) √look.for > nurse(s)
    'That hospital is looking for a nurse/nurses (to hire).'

    (ii) ?nurse(s) > look.for
    'There is a nurse/are nurses that hospital is looking for.'

- Similar facts are observed in Japanese and Malay, except for (i) (existential/unaccusative sentences).

JAPANESE

(6) Karera-wa *gakusei(*-tati)* da.
they-TOP student-PL be
'They are students.'

(7) *Itariazin-tati*-wa yooki-da.
Italian-PL-TOP cheerful-COP

  (i) ???'Italians are cheerful.'
  (ii) √'Some group of Italians are cheerful.'
  (Nakanishi and Tomioka 2004:114)

(8) Sono byooin-wa *kangohu-tati*-o sagasi-teiru.
that hospital-TOP nurse-PL-ACC look.for-PROG

  (i) *?look.for > nurses
  'That hospital is looking for nurses (to hire).'

  (ii) √nurses > look.for
  'There is a group of nurses that hospital is looking for.'

  cf. Sono byooin-wa *kangohu*-o sagasi-teiru.
  that hospital-TOP nurse-ACC look.for-PROG

    (i) √look.for > nurse(s)
    'That hospital is looking for a nurse/nurses (to hire).'

    (ii) ??nurse(s) > look.for
    'There is a nurse/are nurses that hospital is looking for.'
    (Nakanishi and Tomioka 2004:115)

MALAY

(9) Mereka *pelajar(*-pelajar).*
they student-PL
'They are students.' (cf. They are the students.)

(10) *Penyanyi(??-penyanyi)* ceria.
singer-PL cheerful
'Singers are cheerful.' (cf. The singers are cheerful.)

(11) (??)Hospital itu sedang mencari *jururawat-jururawat.*[2]
hospital that PROG look.for nurse.PL

  (i) *?look.for > nurses
  'That hospital is looking for nurses (to hire).'

  (ii) ?nurses > look.for
  'There is a group of nurses that hospital is looking for.'

  cf. Hospital itu sedang mencari *jururawat.*
  hospital that PROG look.for nurse

    (i) √look.for > nurse(s)
    'That hospital is looking for a nurse/nurses (to hire).'

    (ii) ??nurse(s) > look.for
    'There is a nurse/are nurses that hospital is looking for.'

- These similarities suggest that a common mechanism is at work for plurals in classifier languages.

- However, that mechanism cannot be definiteness.

Nakanishi and Tomioka's (2004) analysis and its limitation

- *-Tati* plurals in Japanese are not always definite.

(12) Kooen-ni *kodomo-tati*-ga i-ta.
park-LOC child-PL-NOM be-PST
'There were children in the park.' (Nakanishi and Tomioka 2004:120)

- The definite-like properties are due to the semantics of *-tati*. The extension of *X-tati* may contain exceptions (i.e. non-Xs).

(13) otokonoko-tati
boy-TATI

  a. 'boys' (uniform)
  b. 'boys and some non-boys represented by the boys' (non-uniform)

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[2]Unmodified plurals sound unnatural in the direct object position. It is not yet clear to me why this is so.

- Explanations for the definite-like properties:

  (ii) cannot serve as predicate nominals (6)
      Not discussed.

  (iii) incompatible with generics (7)
      A generalization becomes less precise if it allows exceptions.

  (iv) take wide scope over intensional verbs (8)
      In the narrow scope reading, the connection between the need and the people to be looked for becomes unreasonable if the latter may contain non-nurses, i.e. finding non-nurses could satisfy the need for nurses.

- This particular analysis does not extend to Mandarin and Malay, as plurals in these languages never allow a non-uniform reading (for common nouns).

- Nevertheless, the irrelevance of definiteness is still valid.

  – Plurals can occur in existential/unaccusative sentences in Malay.

(14) Ada *burung-burung* di atas pokok.
      be bird.PL   at on   tree
      'There are birds on the tree.'

      cf. Ada dua naskhah *majalah (*itu)* di atas meja.
           be two CLF   magazine that at on table
           'There are (*the) two magazines on the table.'

  – Yorifuji (1976): Indefinites with *-men* in Mandarin are not totally disallowed.[3]

(15) Xiao he liushui   hua hua xiang, xiang *haizi-men* zai
      small river flowing.water rush rush sound like child-MEN PROG
      gechang.
      sing
      'Rushing creek water sounds like children singing a song.'
                                              (Yorifuji 1976:86)

  – Plurals can be interpreted even as non-referential/non-specific indefinite when they are followed by a restrictive modifier (16a)/(17a) or used contrastively (16b)/(17b).[4]

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[3]Similar situations have been reported for plurals in Cantonese (Au-Yeung 2007; Matthews and Yip 2011) and Korean (Kwon and Zribi-Hertz 2004). Plurals in these language are often interpreted as definite, but they do in fact allow an indefinite interpretation.

[4]Nakanishi and Tomioka (2004) attempt to understand this phenomenon also as a result of the potential inclusion of exceptions allowed by their semantics of *-tati*. Again, such an analysis is not crosslinguistically viable.

JAPANESE

(16) a. Karera-wa *yuusyuuna gakusei-tati* da.
          they-TOP excellent   student-PL be
          'They are excellent students.'
      b. *Kodomo-tati*-wa itumo *otona-tati*-no mane-o   suru.
          child-PL-TOP   always adult-PL-GEN imitation-ACC do
          √'Children always imitate adults.'
                                  (Nakanishi and Tomioka 2004:136)

MALAY

(17) a. Mereka *pelajar-pelajar cemerlang.*
          they   student.PL   excellent
          'They are excellent students.'
      b. *Budak-budak* selalu meniru orang dewasa.
          kid.PL   always imitate person adult
          'Children always imitate adults.'

Summary
The definite-like properties of plurals in classifier languages are not due to definiteness as such.

→ What is the real source of the definite-like properties?

3 Plurals are referential

3.1 Claim

- The real source of the definite-like properties is referentiality.[5]

- Typical referential expressions are definites, but some indefinites are also referential.

- Plurals in classifier languages are basically referential.

- Explanations for the definite-like properties:

  (ii) cannot serve as predicates
      Referential expressions are individuals (type e), but not properties (type $\langle e, t \rangle$).

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[5]The term 'referential' is used in the traditional sense here. It is synonymous with 'specific'. The term has also been used in a more restricted manner, referring to those DPs which allow unbounded/long A-bar movement (e.g. Cinque 1990; Chung 1994).

(iii) incompatible with generics
   Referential expressions denote particular discourse referents.

(iv) take wide scope over intensional verbs
   Referential expressions take the widest scope because they are indexicals, which only depend on the context of utterance and do not interact with intra-sentential operators (e.g. Fodor and Sag 1982; Kratzer 1998).

3.2 Similarities with other referential expressions

3.2.1 Demonstrative phrases in English

- Being indexical, plurals resemble definites, especially demonstratives.

- Wolter (2007), Kaneko (2007): DPs with *that/those* in English can be non-referential when they contain a restrictive postnominal modifier. cf. (16), (17)

(18) Narrow scope with respect to a modal
   a. *That person [at the top of the list] could have been someone else.*
      (Wolter 2007)
   b. #*That person could have been someone else.*

(19) Predicative use
   They are *those acts [which keep one's reputation bright without reference to a specific previous indebtedness to another person].*
      (R. Benedict *The Chrysanthemum and the Sword*, cited in Kaneko (2007))

3.2.2 DPs with *-i* in Persian

- Persian is an optional classifier language.

- Plurals are interpreted as definite, unless they are suffixed with *-i* (Ghomeshi 2003).

(20) a. *Bačče-hâ-ye   bâhuš* unjâ bâzi mi-kard-an.
      child-PL-MOD clever there play DUR-do.PST-3PL
      'The clever children were playing there.'
   b. *Bačče-hâ-ye   bâhuš-i*   unjâ bâzi mi-kard-an.
      child-PL-MOD clever-INDF there play DUR-do.PST-3PL
      'Clever children were playing there.'   (Ghomeshi 2003:59–60)

- Thus, the definiteness arises as a default interpretation and is not encoded by the plural marker.

- Ghomeshi (2003:61): "[T]he presence of *-i* on a noun entails that the noun must be referential"

   Thackston (1983) claims that *-i* means 'a certain, a particular' thing, or 'one of a class', while Lyons (1999:90) states that 'it is approximately equivalent to *any* in non-assertive contexts and *some . . . or other* in positive declarative contexts." (Ghomeshi 2003:61)

- In stories, a new referent is normally introduced by DPs with *-i* (p.c. Satoko Yoshie).

(21) Nominal forms and interpretations for plural referents
   a. NP: non-referential indefinite (number-neutral)
   b. NP-*hâ-i*: referential indefinite
   c. NP-*hâ*:   definite

- Not only 'NP-*hâ*' (definite) but also 'NP-*hâ-i*' (referential indefinite) cannot serve as predicate nominals (22), or take wide scope over intensional verbs (23).

(22) a. Ânhâ *dânešju*-and.
      they   student-be.3PL
      'They are students.'
   b. *Ânhâ *dânešju-hâ*-and.
      they   student-PL-be.3PL
   c. *Ânhâ *dânešju-hâ-i*-and.
      they   student-PL-INDF-be.3PL

(23) a. Ân bimârestân donbâl-e *parastâr*   mi-gard-ad.
      that hospital   sequence nurse-MOD DUR-turn-3SG
      (i) √look.for > nurse(s)
           'That hospital is looking for a nurse/nurses (to hire).'
      (ii) √nurse(s) > look.for
           'There is a nurse/are nurses that hospital is looking for.'
   b. Ân bimârestân donbâl-e   *parastâr-hâ(-i)* mi-gard-ad.
      that hospital   sequence-NOM nurse-PL(-INDF) DUR-turn-3SG
      (i) *look.for > nurses
           'That hospital is looking for nurses (to hire).'
      (ii) √nurses > look.for
           'There are nurses that hospital is looking for.'

- DPs with *-i* can be interpreted as non-referential when they are followed by a restrictive modifier.

(24) a. *Ânhâ *dânešju-ye* *xub*-and.   cf. (22a)
they   student-MOD good-be.3PL

b. *Ânhâ *dânešju-hâ-ye* *xub*-and.   cf. (22b)
they   student-PL-MOD good-INDF-be.3PL

c. Ânhâ *dânešju-hâ-ye* *xub-i*-and.   cf. (22c)
they   student-PL-MOD good-INDF-be.3PL
'They are good students.'

> **Claim:** Other classifier languages have a covert equivalent of Persian *-i*.

3.3   Summary of the empirical findings

- The definite-like properties of plurals in classifier languages are observed because plurals are basically referential.

- Plurals seem to be non-referential when they are modified or used contrastively.

- A definite reading is obtained by default (in languages without overt definite marker). Plural morphology itself does not encode definiteness.

- Plurality and referentiality are encoded by two distinct morphemes (e.g. *-hâ* and $\emptyset$/*-i* in Persian).

4   Analysis

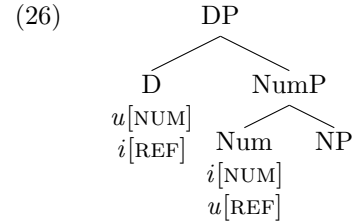## 4.1   Referentiality

The DP structure

- Plural markers are merged in Num.[6]

- The referentiality of plurals is due to referential determiners in D (cf. Longobardi 1994, 2005).

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[6]I analyse classifiers as singular number markers that are also merged in Num. A similar agreement process discussed here is thought to be involved in nominals with classifiers. See Nomoto (2013) for details.

(25)

Language	Definite D	Referential indefinite D
Persian	$\emptyset_{\text{definite}}$	*-i*[7]
Yi (Jiang and Hu 2012)	su^{44}	$\emptyset_{\text{indefinite}}$
Malay, Japanese, Mandarin	$\emptyset_{\text{definite}}$	$\emptyset_{\text{indefinite}}$

- These determiners are interpreted as property-to-argument type-shifters, i.e. ι (definite) and choice function (indefinite).

- Plurals thus project DP as in (26).

(26)

- Features associated with D:
  - NUM(ber): uninterpretable, because determiners inflect for number in many languages
  - REF(erentiality): interpretable

- Features associated with Num:
  - NUM: interpretable
  - REF: uninterpretable, because plural markers in Weining Ahmao infect for definiteness (Gerner and Bisang 2010) (27)

(27) a. pi^{55} ti^{55} nie^{55} hi^{44} zau^{55}.
our   PL.DEF tooth not good
'Our teeth are not in a good state.'

b. pi^{55} di^{34} nie^{55} hi^{44} zau^{55}.
our   PL.INDF tooth not good
'Some of our teeth are not in a good state.'

(Gerner and Bisang 2010:591)

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[7]Ghomeshi (2003) analyses *-i* as occupying Q rather than D, based on semantic differences between *-i* and the null definite marker. I assume that the relevant semantic differences result from differences in lexical semantics rather than syntactic category.

Chomsky's (2000, 2001) theory of Agree

- Agree involves two active heads, i.e. heads with uninterpretable features.

- An uninterpretable/unvalued feature ('probe') searches its c-command domain for the closest interpretable/valued feature ('goal').

- Upon matching, the value of the goal is copied onto the probe, which may be reflected phonologically.

ϕ-feature agreement and Case

- Chomsky (2000, 2001): Case is assigned as a side effect of ϕ-feature agreement.

- Radford (2009:404) posits uninterpretable valued Case features.

(28)

	T	$[_{vP}$ $[_{DP}$	D	
a.	u[CASE: Nom], $u[\phi:\quad]$		u[CASE: $\quad$], $i[\phi:$ 3SgF]	$\ldots]$ $\ldots]$
b.	u[CASE: Nom], $u[\phi:$ **3SgF**]		u[CASE: $\quad$], $i[\phi:$ 3SgF]	
			(ϕ-feature agreement)	
c.	u[CASE: Nom], $u[\phi:$ 3SgF]		u[CASE: **Nom**], $i[\phi:$ 3SgF]	
			(Case agreement[8])	

Referentiality agreement

- Plurals are referential because the uninterpretable REF feature of plural markers must be valued/checked (referentiality agreement).

- Referentiality agreement depends on number agreement, much like Case agreement depends on ϕ-feature agreement in (28).

- Number agreement is possible because Num is active, having an uninterpretable REF feature.

(29)

	D	$[_{NumP}$	Num	
a.	u[NUM: $\quad$], i[REF: ι/CH]		i[NUM: plural[9]], u[REF: $\quad$]	$\ldots]$
b.	u[NUM: **plural**], i[REF: ι/CH]		i[NUM: plural], u[REF: $\quad$]	
			(number agreement)	
c.	u[NUM: plural], i[REF: ι/CH]		i[NUM: plural], u[REF: **ι/CH**]	
			(referentiality agreement)	

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[8]Nomoto (2013) suggests that only the valuation component, but not the probing component, is involved here.

[9]The specific feature representation associated with the plural number is orthogonal to the current discussion. In Nomoto (2012, 2013), I propose two binary features to express four basic number categories, i.e. singular, plural, morphologically unmarked general and morphologically marked general.

- Plural markers are licensed by referential determiners by means of syntactic agreement.[10]

4.2 Non-referential readings

Generalization

- Plurals become less referential when they are modified or used contrastively.

- "Less referential": Such plural forms sound neither totally referential nor totally non-referential.

(17)
   a.   Mereka *pelajar-pelajar cemerlang.*
       they   student.PL   excellent
       'They are excellent students.'
   b.   *Budak-budak* selalu meniru orang dewasa.
       kid.PL   always imitate person adult
       'Children always imitate adults.'

Wolter's (2007) analysis of demonstratives

- A demonstrative determiner bears a numerical index (n in (30)) and it saturates the situation argument position of the nominal complement (s_n in (30)).

- This situation variable is free, with its value determined contextually.

(30) $[\![\text{that}_n]\!]$: $\lambda P_{\langle s,et \rangle}$: $P(s_n)$ is a singleton set and s_n is free.
       If defined, denotes $\iota x.P(x)(s_n)$ (Wolter 2007:620)

- A modifier introduces a new situation variable independent of that of the head noun (Dayal 2004).

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[10]In fact, they are also licensed by quantifier determiners. It is thus more apt to call the referentiality feature as 'argument feature', with its values ranging between ι, CH and quantifiers such as $\exists$. See Nomoto (2013) for details.

- In a structure like (31), this new situation variable (s_k) mediates the situation of a higher predicate and that of the modified DP (s_1), whose situation variable is otherwise completely free.[11]
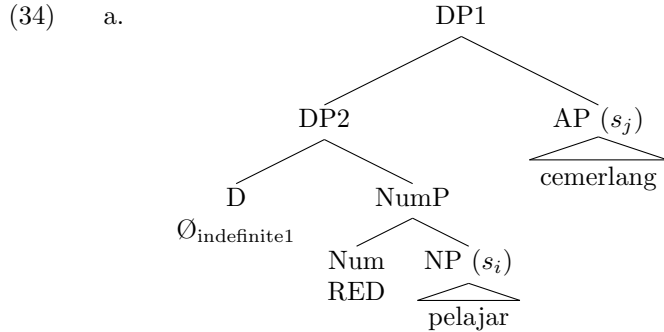
(31)

DP
├── DP
│   ├── D — that$_1$
│   └── NP (s_1) — person
└── AP (s_k) — responsible
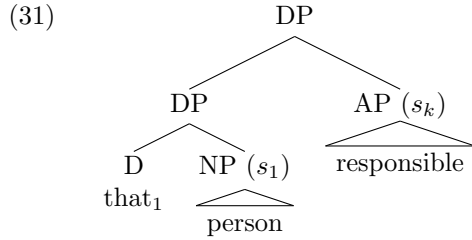
(32) a. John believes that that person responsible left.[12] (Wolter 2007:622)
      b. $\lambda s[\forall s_2 \in \text{Dox}_j(s, s_2)[\text{left}(\iota x.\text{person}(x)(s_1) \wedge \text{responsible}(x)(\boldsymbol{s_2}))(s_2)]]$
      c. *that person responsible*: 'a unique person in some contextually salient situation (s_1) who is responsible in John's belief world (s_2)'

Modified plurals

(17a) Mereka *pelajar-pelajar cemerlang*.
       they   student.PL   excellent
       'They are excellent students.'

(33) $[\![\varnothing_{\text{indefinite}n}]\!] = \lambda P_{\langle s,et \rangle} : s_n \text{ is free. CH}(P)(s_n)$

(34) a.

DP1
├── DP2
│   ├── D — $\varnothing_{\text{indefinite}1}$
│   └── NumP
│   ├── Num — RED
│   └── NP (s_i) — pelajar
└── AP (s_j) — cemerlang

      b. $\lambda s[\text{GEN}s_2[3\text{PL}(x) \wedge \text{C}(x, s_2)][x = \text{CH}(\text{students}(s_1) \wedge \text{excellent}(s_2))](s_2)]$
         'Every situation of the appropriate type containing the relevant third person plural individual is a situation in which that individual is certain students in s_1 picked out by a choice function who are excellent.'
         ($\approx$ 'They are those students who are excellent.')

- Situation argument of NP (s_i): saturated by the numerical index of D (s_1)
- Situation argument of AP (s_j): not saturated by the numerical index of D[13]
  $\rightarrow$ bound by the GENeric operator (s_2)
  $\rightarrow$ narrow scope reading with respect to GEN

Contrastive plurals

(17b) *Budak-budak* selalu meniru orang dewasa.
       kid.PL   always imitate person adult
       'Children always imitate adults.'

- Contrast also introduces a new situation variable as modifiers do.
- How?
  - Contrast is a kind of focus.
  - Rooth (1992): Focus introduces a free variable that can be anaphoric to a variety of pragmatic and semantic objects (v in (35)).
  - Proposal: This free variable comes with a situation variable independent of the noun phrase that is brought into focus (s_j in (35)).
- This situation variable mediates between the situation of a higher predicate and that of the DP that is brought into contrast.

(35)

FocP
├── Foc — $v(s_j)$
└── DP
    ├── D — $\varnothing_{\text{indefinite}1}$
    └── NumP
        ├── Num — RED
        └── NP(s_1) — budak

5 Beyond classifier languages

Q: Is this phenomenon peculiar to classifier languages?

- No. Plurals in Papiamentu (a Portuguese-based creole spoken in the ABC-islands Aruba, Bonaire and Curaçao) also show similar behaviours (Kester and Schmitt 2007).

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[11]This is not the case if the modifier is in a position c-commanded by D. Wolter (2007) assumes such a structure for prenominal modifiers, which do not affect the referentiality of the modified nominal.
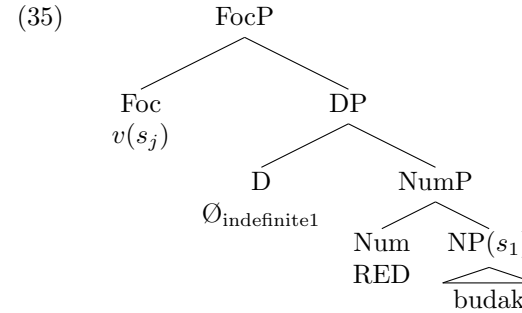
[12]Not all speakers judge this sentence as grammatical.

[13]The composition of DP2 and AP requires a type-shifting mechanism. Nomoto (2013) proposes a variant of Bach and Cooper's (1978) semantics for high-adjoined relative clauses.

- Bare plurals are incompatible with generics "unless they receive contrastive focus intonation or are modified" (Kester and Schmitt 2007:114).

(36) *Mucha-nan ta   inteligente.
       child-PL   are intelligent
       For: ' Children are intelligent.'   (Kester and Schmitt 2007:114)

- In subject position, bare plurals "refer to a pre-specified set" (Kester and Schmitt 2007:115).

(37) Despues ku hende-nan a   keha,   nan a   drecha e película.
      after   that person-PL PST complain they PST fixed   the film
      'After some people complained, they fixed the film.' (reporting an episode witnessed by the speaker)   (Kester and Schmitt 2007:115)

- In object position, bare plurals sound odd/unacceptable "unless they are modified" (Kester and Schmitt 2007:115). cf. footnote 2

(38) a.   Mi ta   mira buki(*-nan) riba mesa.
           I PRS see book-PL   on table
           'I see books on the table.'
      b.   Mi ta   mira buki-nan na spañó   riba mesa.
           I PRS see book-PL in Spanish on   table
           'I see Spanish books on the table.'   (Kester and Schmitt 2007:116)

Q: What factor distinguishes between the classifier/Papiamentu type and the English type plurals?

- Presence of overt definite articles?
  → No. Papiamentu as well as some classifier languages (e.g. Yi) have overt definite articles.

- Basic number system?
  → No. According to Kester and Schmitt's description, Papiamentu has the same basic number system as Brazilian Portuguese, i.e. 'SG/GN : GN/PL' (Nomoto 2012, 2013), where morphologically unmarked as well as morphologically plural forms are associated with the general number. However, bare plurals in Brazilian Portuguese behaves like bare plurals in English.

- The relevant factor should be found among the differences between Papiamentu and Brazilian Portuguese.

- Kester and Schmitt (2007) point out that the definite determiner in Papiamentu (P) lacks the so-called "expletive" uses (Vergnaud and Zubizarreta 1992; Longobardi 1994), unlike that of Brazilian Portuguese (BP).

(39) Definite singular kind
      P: #E   bayena ta un mamífero.
           the whale is a mammal
      BP: A   baleia é um animal mamífero.
           the whale is a   animal mammal
           'The whale is a mammal.'   (Kester and Schmitt 2007:119)

(40) With proper names
      P: (*E) Maria tabata malu.
           the Maria was   sick
      BP: (A) Maria estava doente.
           the Maria was   sick
           'Maria was sick.'   (Kester and Schmitt 2007:121)

Hypothesis

- The substantial uses of definite determiner, overt and covert, are universal whereas the expletive uses are language-specific.

- If the definite determiner in a language has expletive uses, its plural morphology lacks a REF feature.

Questions concerning this hypothesis

- Why does the plural morphology of expletive definite determiner languages lack a REF feature?

- If the plural morphology in these languages lack a REF feature, what other feature makes Num active for number agreement between D and Num?

- Does number agreement in expletive definite determiner languages actually an instance of Agree? It could be a post-syntactic process (cf. Norris 2012).

(41) P: e   kas-nan grandi
           the house-PL big
           'the big houses'
      P': *e-nan kas-nan grandi-nan
           the-PL house-PL big-PL
      BP: a-s   casa-s   grande-s
           the-PL house-PL big-PL
           'the big houses'   (Kester and Schmitt 2007:133)

6 Conclusion

Summary

1. The definite-like properties of plurals in classifier languages (e.g. inability to serve as predicates, incompatibility with characterizing generics, obligatory wide scope) are observed because plurals are referential, but not because they are definite.

2. Plurals are referential not because the plural morphology encodes plurality and referentiality at the same time, but because the plural morphology must be licensed by a referential determiner in D by means of syntactic agreement.

3. The definite-like properties disappear when plurals are modified or used contrastively. This is because these two factors introduce a new situation variable that mediates between the situations of the DP and a higher predicate.

Implications

- #2 above
  → Plurals in classifier languages must project DP if they are arguments. D provides NPs/NumPs with argument status as well as referential interpretation. Projecting only NP or NumP cannot account for the referential interpretation.

- Ds in classifier languages have an uninterpretable number feature.
  → If all argument nominals are DPs (Longobardi 1994, 2005), then all arguments contain NumP as well. Otherwise, the uninterpretable number feature of D would not be valued.
  → Even truly bare argument nouns in classifier languages (e.g. *buku* 'book' in Malay) project NumP and DP.

- Truly bare nouns in classifier languages are number-neutral/general (e.g. Rullmann and You 2006).
  → An adequate theory of number features must be able to handle general number. e.g. McGinnis (2005), Nomoto (2012, 2013)

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