

Countability and number without number inflection: evidence from Haitian Creole

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This chapter focuses on the "Mass/Count" distinction in Haitian Creole, in relation with "counters"—comprising numerals and the non-inflectional (definite) plural marker *yo*. Like Indonesian, discussed by Dalrymple and Mofu (2012), Haitian seems to allow any noun to be "counted", viz. combined with a counter without an overt classifier, regardless of the discrete or continuous nature of its lexical denotation. Contrary to Dalrymple and Mofu, who claim that Indonesian numerals contain their own classifier features so that the Mass/Count distinction is irrelevant for that language, it is argued that the Mass/Count distinction is indeed relevant for Haitian and is jointly anchored in syntactic structure and in the lexicon: some lexical nouns (e.g. *liv* 'book') carry their own classifier—unit-identifying—feature, while others (e.g. *labou* 'mud') do not but may be syntactically combined with a classifier feature whose precise construal may be inferred from context. In line with Wiltschko ([chapter XX](#)), two structural positions are distinguished for the classifier feature in order to formalize this contrast. Two diagnostic tests (pronominalization and small-quantity expressions) are proposed for Haitian to separate lexically-atomic nouns such as *liv* 'book' from nouns such as *labou* 'mud', which may lack atomicity altogether ("Mass" construal) or acquire it through syntax ("Count" construal).

1. Introduction

This chapter explores the grammar of Number in the Haitian Creole (HC) noun phrase. HC¹ is a French-based creole language, whose lexicon is mostly derived from French while its grammar is drastically different. The grammatical concept of Number subsumes the singular/plural distinction and is tightly linked to Countability,²

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Many thanks to Patricia Cabredo Hofherr, Michel DeGraff and Jenny Doetjes for their useful comments on previous drafts of our text.

¹ Our HC data include examples spontaneously produced by various Haitian students in writing exercises independent from this work, and examples made up by the two Haitian authors of this three-authored text, both of whom were born and raised in Haiti and are currently studying and teaching at the State University of Haiti.

² We borrow this term from Joosten (2003).

commonly known as the "Mass/Count" distinction. The Mass/Count contrast was originally introduced in English linguistics (Jespersen 1909) as an attempt to correlate the grammatical properties of nouns to the ontological properties of their denotata: thus, English nouns denoting discontinuous entities, labelled *Count nouns* readily inflect for plural (*I like dogs*), those denoting continuous substances (*Mass nouns*) do not (?**I like milks*). Much work has been carried out since Jespersen on this topic, as witnessed by several chapters of the present volume, showing that grammar does not directly reflect the properties of matter but rather guides our semantic construal of it (Rothstein 2010), and exploring the array of lexical, semantic and/or syntactic sources of Countability effects across natural languages, beyond number inflection.

Like Chinese (Doetjes 1997, Cheng *et al.* 2008, a.o.), HC does not have number inflection; but in contrast with Chinese, neither does HC have generalized classifiers, viz. obligatory overt classifiers with all counted nouns. HC, however, does have a phrasal plural marker, and numerals expressing counting—naturally correlating with Countability. In contrast with English or French nouns, all Haitian nouns may be directly combined with cardinals and the plural marker, and thereby appear "countable"—a property also observed for Indonesian by Dalrymple and Mofu (2012), who conclude that the Mass/Count distinction is irrelevant in that language. Contrary to these authors regarding Indonesian, however, but in agreement with Aboh and DeGraff (2014), we argue that the Mass/Count distinction is relevant in HC, and more precisely, that Haitian nouns are lexically subdivided into those that are and those that are not open to a continuous ("mass") denotation. We show how this lexical property interacts with syntax to guide interpretation and how the behavior of HC nominals with respect to Countability may be formalized along the lines proposed by Wiltschko (chapter XX) distinguishing two structural positions for the Unit feature giving rise to what Rothstein (2010) calls *semantic atomicity*.

We first provide (section 2) some background information on relevant aspects of DP morphosyntax in Haitian (bare nominals, determiners and plural marking) before moving on to section 3, which bears on the Countability issue. Section 4 summarizes our main results.

2. Background information on DP morphosyntax in HC

This section summarizes some properties of the HC Noun Phrase that have a direct impact on the Countability issue. The morphosyntax of HC noun phrases has been discussed in many linguistic works, cf. Joseph (1988), DeGraff (1992, 2001, 2007), Ritter (1992), Lefebvre (1998), Déprez (2007), Zribi-Hertz and Glaude (2007), Glaude (2012), Aboh and DeGraff (2014), a.o. For practical reasons, we limit our description to simplex (non-relativized) noun phrases.³

2.1. Non-inflectional morphology

HC morphology is globally non-inflectional with respect to two criteria proposed in chapter XX (*The syntax of number markers, Wiltschko*): (i) functional markers expressing TMA and number do not attach to lexical roots as word-level affixes; (ii) functional features do not partake in agreement/concord relations within clauses or noun phrases. Thus, TMA markers occur as free morphemes separate from verbs (1b); the plural marker *yo*, to which we return below, occurs only once in a simplex DP, at the

³ See Zribi-Hertz and Glaude (2007) for a presentation of relativized DPs.

right edge of the DP (1c, d), and since there is no subject-predicate agreement, *yo*-marked subjects trigger no plural marking on the associated predicate (1d):

- (1) a. Gason an achte {yon //de} liv wouj.⁴
 boy DET buy one/a//two book red
 'The boy bought {a/one//two} red book(s).'
- b. Gason an **te** achte {yon //de} liv wouj.
 boy DET ANT buy one/a//two book red
 'The boy had bought {a/one//two} red book(s).'
- c. Gason an (te) achte liv wouj **yo**.
 boy DET ANT buy book red PL
 'The boy (had) bought the red books.'
- d. Gason **yo** (te) achte yon liv wouj.
 boy PL ANT buy a/one book red
 'The boys (had) bought a/one red book.'

2.2. Generalized bare noun phrases

Following Aboh and DeGraff (2014), we call *Bare Noun Phrases* (BNPs) those including neither a quantity marker nor one of the three functional morphemes presented in the next subsections: pragmatic-definite LA (2.3), demonstrative *sa* (2.4), plural *yo* (2.5). HC has "generalized bare nouns": BNPs may occupy any structural slot open to noun phrases: subject (2), dislocated topic (3), complement of V (4), complement of P (5), identificational complement of *se* (6).

- (2) a. **Moun** pa pèdi isi a.
 person NEG lose here DET
 'People don't get lost here.'
- b. **Enskripsyon** dire de jou.
 registration last two day
 'Registration lasts for two days.'
- c. **Chen** antre nan kay la.
 dog enter in house DET
 Lit. 'DOG entered the house.' (interpretation discussed below)
 [adapted from Aboh and DeGraff 2014: 214]
- d. Se **travay** ki pèmèt moun manje.
 'It is work that allow person (to) eat.'
- (3) **Avètisman pou lapriyè**, m pran avètisman sa yo pou avètisman dife.
 call for prayer 1SG take call DEM PL for call fire
 '(As for) calls for prayer, I took those calls for fire alerts.'
- (4) a. Genyen **restoran, medsen**, plizyè jounal.
 have restaurant doctor several newspaper
 'There are restaurants, doctors, several newspapers.'

⁴ Abbreviations used in our glosses of HC: ANT = anterior; DET = determiner; DEM = demonstrative; IPFV = imperfective; LOC = locative; NEG = negation; PL = plural; Q = question marker; SG = singular; 1, 2, 3 = first, second, third person; SE = *se* (untranslatable).

- b. Papa m voye **kòb** pou mwen.
dad 1SG send money to 1SG
'My dad sends me money.'
- c. Yo la pou aprann **arab** oubyen **relijyon**.
3PL here to learn Arabic or religion
'They are here to study Arabic or religion.'
- (5) a. Mwen te nan **fakilte** /**prizon** lè yo rele m nan.
1SG ANT LOC university/jail when 3PL call 1SG DET
'I was at the.university/in jail when they called me.'
- b. Nou ale ansanm nan **lapolis**.
we go together LOC the.police
'We went to the police together.'
- (6) Pifò nan etidyan yo se **kreyen**.
most LOC student PL se Christian
'Most of the students are Christians.'

The interpretation of BNPs is dependent on lexical features and context. Borrowing from Loebner's (1985, 2011) logical typology of nouns, we distinguish *sortal nouns*, which are unary predicates of type <e,t> denoting types of entities which may a priori have an open set of instantiations (e.g. *chen* 'dog', *moun* 'person') from *individual nouns*, which are individual terms of type <e> carrying a uniqueness presupposition pertaining to the common ground (e.g. '(the)moon', '(the)pope', '(the)truth', etc.), which makes them akin to proper names: they are "semantic definites", in Loebner's terms. Haitian BNPs headed by sortal nouns are construed semantically as generic (as in (2a), (3)) or existential (as in (2c), (4a,b))—using Carlson's (1977) terms—while those headed by individual nouns are construed as singular *Names* (Zribi-Hertz and Jean-Louis 2014), viz. as "semantic definites", as in (4c) : '(the)Arabic(language)' /'Religion' as unique topics of study. The semantic-definite interpretation of BNPs also accounts for such examples as (7), from Aboh and DeGraff (2014), where the (sortal) noun *wòsiyòl* is contextually turned into a singular Name—an individual noun, a context-dependent proper name: *Wòsiyòl*:⁵

- (7) Bouki te marye ak yon bèl wòsiyòl.
Bouki ANT marry with a pretty nightingale
Wòsiyòl te renmen kowosòl.

⁵ This strategy is available across languages. The noun phrase antecedent from which the name is created may be understood literally (*there was a dog and a cat... Cat said to Dog...*), metaphorically (as in the Haitian example in (7)), or metonymically, as in (i):
(i) "(...) One of [the men] had an animal hide wrapped around his waist and circles of necklaces hanging down his chest (...) tiny beads all sewn together in a pattern like the American flag—red, white and blue. "Where'd you steal the horse?", **American Flag** said (...)." (Tom Spanbauer, 1991, *The man who fell in love with the moon*: 155. New York: Grove Press). This possibility accounts for Aboh and DeGraff's validation of a "definite" interpretation for the bare subject *chen* in (2c): this would only be possible in a discourse allowing *chen* to be construed as a context-created Name, as in (7). Without such a context, *chen* in (2c) may only be understood as denoting an unspecified number of atomic animals.

- (9) a. Ti gason an ale **lekòl** aprèmidi.
 little boy DET go school afternoon
 'The little boy goes to school in the afternoon.'
- b. Ti gason an pral **lekòl la** aprèmidi a.
 little boy DET is.going school DET afternoon DET
 'The little boy is going/will go to the (pre-identified) school this afternoon.'

With a sortal head-noun such as *liv* 'book' in (8), LA correlates with a singularity effect: thus, while *liv* in (8a) provides no information about the quantity of books involved in the buying process, *liv la* in (8b) can only refer to a singleton BOOK entity. However, since LA may otherwise combine with the plural marker *yo* within a noun phrase, as illustrated below in (10b), LA itself cannot be analysed as specified for the singular: rather, the singularity effect in (8b) arises from the absence of the plural marker *yo* —an instance of the "Blocking Principle" (cf. [chapter XX, Bare nouns and number, De Swart](#)):⁸

- (10) a. Aniz renmen liv la ø.
 Aniz like book DET -PL
 'Aniz likes the book.'
- b. Aniz renmen liv la yo. [dialectal HC]
 Aniz like book DET +PL
- c. Aniz renmen liv ø yo. [mainstream HC]
 Aniz like book DET +PL
 'Aniz likes the books.'

The occurrence vs. non-occurrence of LA in plural DNPs is discussed below (section 2.5).

Analysing Haitian LA as a marker of pragmatic definiteness⁹ is consistent with the assumption that the D-head has an *anchoring* function (see [chapter XX, The syntax of number markers, Wiltschjko](#)). This is further confirmed by the occurrence of LA in bridging contexts, rightly pointed out by Aboh and DeGraff (2014):

- (11) Mwen te achte yon machin tou nèf...
 1SG ANT buy a car all new
 'I bought a brand-new car.
 Mezanmi o! **Volan** an te kwochi.
 my.friend oh steering-wheel DET ANT crooked
 Oh dear! The steering-wheel was crooked.'
 [adapted from Aboh and DeGraff 2014: 229]

The LA determiner (spelt out *an*) in (11) is motivated by bridging: LA provides unique identification of the steering-wheel referent by anchoring it to the just-mentioned, singular CAR-referent.

2.4. *Sa* : demonstrative marker

⁸ This assumption seems shared by all scholars working on the Haitian noun phrase (e.g. Déprez 2007, Glaude 2012, Aboh and DeGraff 2014, Govain 2016).

⁹ This assumption is also proposed in Zribi-Hertz and Jean-Louis (2014) on the basis of Martinican data.

Demonstrative *sa* (glossed as DEM) is an optional semantic "pointer" which has no bearing on Countability. In standard writing, *sa* is followed by the determiner LA, regularly realized as *a* after an oral vowel (see fn.6)—in singular noun phrases.¹⁰ *Sa* adds an ostensive flavour to the interpretation but is neutral with respect to the proximal/distal contrast—unlike English *this/that*, but like French *ce*:

- (12) a. Aniz renmen liv la.
 Aniz like book DET
 'Aniz likes the book.'
- b. Aniz renmen liv sa *(a). [...livsaa]/*[livsa]
 Aniz like book DEM DET
 'Aniz likes this/that book.'

In standard writing, the LA determiner is omitted in the presence of the plural marker *yo*, whether the demonstrative appears or not (cf. (10b,c) above). We however assume that *sa* in the HC noun phrase must be syntactically licensed by DET regardless of number marking, an assumption confirmed by Govain's (2016) fieldwork showing that *sa* (as a nominal determiner) is generally pronounced with a long vowel ([saa]) in both the singular (12b) and the plural (13b). Our analysis is further supported by the fact that the DEM/DET dependency is common to all French-based creoles in both the American and Indian-Ocean zones (Syea 2017).

	PRONUNCIATION	MORPHOLOGICAL DECOMPOSITION	STANDARD SPELLING	TRANSLATION
(13) a.	[livlajo]	liv LA yo	liv — yo	'the books'
b.	[livsaa]	liv sa LA ∅	liv sa a	'this/that book'
c.	[livsaa]jo	liv sa LA yo	liv sa — yo	'these/those books'

2.5. Yo: the plural marker

The morpheme *yo* is historically derived from the French 3PL-masculine strong pronoun *eux* [ø], and it occurs in Haitian both as the 3PL pronoun (14b) and as a plural marker in the DP (15b,c), where it may co-occur with a numeral (15c):

- (14) a. Fegens_z vini lakay nou men Nelson pa wè li_z.
 Fegens come home 1PL but Nelson NEG see 3SG
 'Fegens_z came to our home but Nelson didn't see him_z.'
- b. [Fegens ak Aniz]_z vini lakay nou men Nelson pa wè yo_z.
 Fegens and Aniz come home 1PL but Nelson NEG see 3PL
 '[Fegens and Aniz]_z came to our home but Nelson didn't see them_z.'
- (15) a. Aniz renmen liv la. [= (12a)]
 'Aniz likes the book.'
- b. Aniz renmen liv (la) yo.

¹⁰ Michel DeGraff (p.c.) observes that some of his HC consultants produce the demonstrative *sa* without a following determiner in singular noun phrases, e.g. *liv sa* 'this/that book', instead of (standard) *liv sa a*. We have also noted such attested sequences but regard this variation as strictly pertaining to writing. This view is in line with Govain's (2016) observations regarding phonology.

- 'Aniz likes the books.'
- c. Aniz renmen de liv (la) yo.
 Aniz like two book DET PL
 'Aniz likes the two books.'

The morphological identity of 3PL pronouns and definite-plural determiners is attested in various other languages (French *les*, Portuguese *os/as*, Spanish *los/las*, Jamaican *dem*, etc.). As mentioned above, the LA determiner fails to occur in the presence of *yo* in Modern mainstream Haitian, but the overt *LA yo* combination is attested as an individual variant: examples of *N LA yo* strings are given by Govain (2016), others are recorded in the Fattier (1998) corpus,¹¹ whose author confirms (p.c.) that they indeed instantiate the older variant of present-day *N yo*. The Haitian co-authors of this chapter confirm that *NP LA yo* strings are still produced today by individual speakers. DPs of the form *NP yo* in mainstream Haitian (16c) are ambivalent between a possessive reading (where *yo* instantiates the 3PL pronoun: (16c-i)) and a definite-plural reading (16c-ii): in this case, they are available in the same discourse contexts as their dialectal variants *NP LA yo* (16b), to which they are semantically equivalent:

- (16) a. Aniz wè de liv.
 Aniz see two book
 'Aniz saw two books.'
- b. Aniz wè **de liv la yo**. [dialectal HC]
 (i) 'Aniz saw the two books.'
 (ii) *'Aniz saw two books.'
- c. Aniz wè **de liv yo**.
 (i) 'Aniz saw their two books.'
 (ii) 'Aniz saw the two books.' [mainstream HC]
 (iii) *'Aniz saw two books.'

Since the plural marker *yo* is restricted to definite DPs, it is banned from all contexts calling for indefinite readings—whether LA is overtly realized or not:

- (17) a. Eske w gen pitit (*yo)?
 Q 2SG have child¹² PL
 'Do you have child(ren)?'
- b. Nan inivèsite sa a, pwofèsè yo mete kòl.
 in university DEM DET professor PL wear tie
 'In this university, the professors wear ties.'
- c. Nan inivèsite sa a, pwofèsè yo mete kòl {#yo/yo}.
 in university DEM DET professor PL wear tie PL/3PL
 'In this university, the professors wear {#the/^{OK}their} ties.'

¹¹ Some examples found in the Fattier corpus: *poul la yo* 'the chickens'; *zé a yo* 'the eggs'; *mont la yo*, *mont lan yo* 'the watches'; *bank la yo*, *bank lan yo* 'the banks'; *moun nan yo* 'the people'. These forms were recorded across Haiti, rather than in one specific area.

¹² *Pitit* means 'child(ren)' in the relational sense ('offspring'), while *timoun* means 'child(ren)' in the sortal sense ('very young human(s)').

This leads us to assume (alongside Déprez 2007, Zribi-Hertz and Glaude 2007, Aboh and DeGraff 2014) that the plural marker *yo* always co-occurs in the syntax with the pragmatic-definite feature conveyed by LA, regardless of LA's overt or null spell-out at PF. This assumption is indirectly supported by the fact that the DET-PL correlation is a general characteristic of Caribbean French-based creoles, as exemplified by (18):

- (18) a. **sé liv-la** /***sé liv**_ [Martinican/Guadeloupean]
 PL book-DET
 'the books'
- b. liv **y(é)-a** /liv **yé**_ [Guyanese]¹³
 book PL-DET /book 3PL
 'the books' /'their book(s)'

Yo, in HC, may combine with proper names, but only to denote the pragmatically-definite members of a family:

- (19) Pòl yo pa vini jodi a.
 Paul PL NEG come today
 (i) 'The Pauls didn't come today.' [the (pre-identified) members of the Paul family]
 (ii) *'Paul and his friends didn't come today.'

Haitian *yo* behaves in this respect like the English inflectional plural (*the Smiths*), but contrasts with some other non-inflectional plural markers such as *dem* in Jamaican, where *Mieri dem* receives an "associative" reading translatable as 'Mary and her friends' (Stewart 2007: 387).

We thus assume that the HC plural marker *yo* is licensed by the pragmatic-definite determiner, whose absence in *liv yo* 'the books' pertains to PF only. The fact that *yo* is linked to D by such a restriction is evidence that it occurs in a syntactic Number head (cf. [chapter XX, The syntax of number markers, Wiltschko](#)), unlike, e.g. the non-inflectional plural marker of Yucatec Maya discussed by Butler ([chapter XX, Non-inflectional plural Yucatec Maya](#)).¹⁴ This assumption is further consistent with the fact that plural marking (by *yo*) is obligatory (for plural readings), if not in all Haitian DPs, at least in the large subclass we call *definite DNPs*. The claim that HC *yo* occurs in the head of a Number Phrase seems consensual among syntacticians, whatever the other varying details of their analyses (Ritter 1992, Lefebvre 1998, Déprez 2007, Zribi-Hertz and Glaude 2007, Glaude 2012, Aboh and DeGraff 2014).

2.6. Partial recap

¹³ Since the Guyanese plural marker *yé* is also homonymous with the 3PL pronoun, *liv yé* is acceptable under the reading 'their book(s)' (cf. (16c-i) in HC); but like *yo* in HC, *yé* in Guyanese can only be construed as the plural marker in pragmatic-definite DPs: in Guyanese these must contain an overt occurrence of LA, which, in this creole, is always spelt out *a* and linearly follows the plural marker, whose vowel [e] undergoes truncation (*yé+a* → *ya*).

¹⁴ The HC data therefore suggest that from a typological perspective, non-inflectional plural markers are not necessarily merged in adjunct positions.

Haitian nominal arguments may surface as Bare Noun Phrases (BNPs) (20a) or as Determined Noun Phrases (DNPs). DNPs either contain an overt or covert occurrence of the LA determiner correlating with a pragmatic-definite reading (20b,c,d), or they are construed as indefinites, in which case they contain a cardinality or quantity marker and fail to include LA, as in (20e,f):

- (20) a. Fegens jwenn **liv**.
 Fegens find book
 'Fegens found book(s).'
- b. Fegens jwenn **liv la**.
 Fegens find book DET
 'Fegens found the book.'
- c. Fegens jwenn liv **sa a**.
 Fegens find book DEM DET
 'Fegens found this/that book.'
- d. Fegens jwenn **(de) liv (sa) yo**.
 Fegens find two book DEM PL
 'Fegens found the (these/those) (two) books.'
- e. Fegens jwenn **de liv**.
 Fegens find two book
 'Fegens found two books.'
- f. Fegens jwenn **{yon/de/anpil} liv**.
 'Fegens found one/two/a.lot.of book(s).'

BNPs are contextually construed as generic or existential (if N° = sortal concept) or as singular Names (if N° = individual concept). DNPs are either definite (if LA is syntactically present) or indefinite (if not). LA has a standard null phonological variant in plural-marked definite DNPs, and an idiolectal null written variant in singular demonstrative DNPs. A characteristic of definite DNPs is that they are syntactically specified for the singular/plural contrast: we assume they contain a Number head hosting the plural marker *yo* or its null singular counterpart.

3. Countability and the Mass/Count distinction

3.1. Counters and Countability

We now turn to the semantic distinction commonly known as Mass vs. Count, corresponding to whether the referent is conceptualized as made up of discontinuous (bounded, discrete, atomic) units allowing *counting*, or as continuous (unbounded) stuff disallowing counting. In English, counting appears to correlate with morphological number, since nouns combined with numerals other than one must be pluralized (*one dog, two dog*(s)*), while nouns denoting continuous substances cannot be (**There are muds in the garden*). Mass/Count effects in Haitian, a language without number inflection, are the topic of this section.

Following Joosten (2003), we call *Countability* compatibility with *counters*, typically illustrated by numerals, whether singular ('one') or plural ('three'), precise ('three') or imprecise ('several'). Counting by definition requires discontinuous units ("atoms": Rothstein 2010). We saw above that definite DNPs, in HC, are specified for number—they are either plural or singular. HC, on the other hand, has no inherent plurals of the type illustrated by French *fontes baptismaux* ('baptismal font') or *arrhes*

('deposit'), or English *mathematics*, which have no singular counterparts and whose plural morphology does not correlate with semantic plurality (cf. [chapters XX, Lexical plurals: Alexiadou; and chapter YY, Singularity, plurality, and the Mass/Count distinction: Bale](#)). The HC plural marker *yo* is, contrastively, always associated with a plural denotation involving more than one atomic unit:

- (21) a. Fegens ap chèche sizo a.
 Fegens IPFV look.for scissor DET
 'Fegens is looking for the scissor.' [single SIZO entity]
- b. Fegens ap chèche sizo yo.
 Fegens IPFV look.for scissor PL
 'Fegens is looking for the scissors.' [two or more SIZO entities]

The plural marker *yo* may therefore be included, alongside numerals, among semantic *counters*, conveying information about the number of atomic units in the intended denotation: *yo* indicates 'more than one'.

3.2. All HC nouns are countable

Our exploration of the HC lexicon leads us to conclude that all lexical nouns may surface directly combined with counters, with possible shades of naturalness linked to frequency and conventionality. Thus, all the examples in (22) are *grammatical*, viz. available and interpretable:

- (22) a. Fegens ban mwen **kat liv**.
 Fegens give 1SG four book
 'Fegens gave me four books.' [= 'four volumes']
- b. M gen **de remò** nan kè m.
 1SG have two remorse LOC heart 1SG
 'I have two remorse(s) in my heart.' [= 'two instances of remorse']
- c. Fòk ou achte **yon gaz/dlo**.
 need 2SG buy one petrol/water
 'You must buy one petrol/water.' [= 'one jerrican/bottle']
- d. Fegens mete **twà diri** sou tab la.
 Fegens put three rice on table DET
 'Fegens put three rice(s) on the table.' [= 'three grains or packets']
- e. Se **yon sèl pitye** mwen toujou konnen,
 se one single pity 1SG always know
 se sa ki imilye moun nan.
 se DEM that humiliate people DET
 'I only ever knew one pity, that which humiliates people.' [= 'one subtype']
- f. Pou konstwi yon bato fò w genyen **10 bwa**.
 to build a boat must 2SG have 10 wood
 'In order to build a boat, you need 10 wood(s).' [= 'pieces of wood']
 [(22f) translated from Dalrymple and Mofu's 2012 Indonesian ex. (28)]

The translations suggest that HC is more liberal than English with respect to Countability: thus, *one petrol* sounds unusual in the English translation of (22c), *three rices* is morphologically deviant in that of (22d), and *ten woods* is unavailable in the (22f) context. We may however note that counting by cardinals is not as restricted in English

as plural inflection: thus *one/two water(s)* for 'one/two bottle(s) of water' is attested in Spoken English (compare: *?I've got waters*), and *one pity* sounds less deviant in the translation of (22e) than would **several pities*.

Counting forces us in all cases to conceptualize atomic units of the Kind denoted by the lexical head-noun: atomic BOOK units (> 'volumes') in (22a), atomic instances of remorse in (22b), atomic packaged units of liquid in (22c), atomic grain or packet units of rice in (22d), atomic subtypes of pity in (22e), atomic pieces of wood in (22f). This semantic property may be captured by the *classifier* concept, imported into general linguistics from such languages as Chinese, whose grammar requires the insertion of specialized unit-identifying items called classifiers (CL) between counters and lexical nouns, with all types of lexical nouns:

MANDARIN CHINESE

- (23) a. sān *(ge) rén
three CL person 'three people'
- b. sān *(zhī) bǐ
three CL pen 'three pens'
- c. sān *(píng) jiǔ
three CL-bottle liquor 'three bottles of liquor'
- d. sān *(bǎ) mǐ
three CL-handful rice 'three handfuls of rice'

[Mandarin ex. from Cheng, Doetjes and Sybesma 2008, ex. (3)-(4)]

A contrast between English and Chinese is that overt classifiers only occur in English with number-neutral nouns denoting unbounded stuff (e.g. *three bottles of milk*/**three milks*), but not with so-called Count nouns—those denoting discontinuous entities, which inflect for number (e.g. *three books*/**three volumes of book*): in other words, English only uses so-called "massifier"-type lexical classifiers identifying units of stuff (Doetjes 1997, Cheng *et al.* 2008). This suggests that the semantic function of such classifiers is to introduce delimitation (boundedness, atomicity) in nominal denotation. The generalized occurrence of classifiers with counters in Chinese, with all types of sortal nouns, is what led Chierchia (1998) to assume that all Chinese nouns are "Mass" in the lexicon (an assumption refuted by other scholars, Cheng *et al.* 2008 a.o.), and others to assume that Boundedness (atomicity) universally arises from a "delimiting" Classifier head in DP syntax (cf. Borer 2005; [chapter XX The syntax of number markers: Wiltschko](#)).

The HC examples in (22) and their English translations suggest that massifier-type classifiers identifying the relevant units of substance are always inserted in the *interpretation* of counted substance-denoting nominals, although these classifiers may be left implicit at PF in HC. Note that overt massifier-type classifiers are available in HC in all examples such as (22): *boutèy dlo* 'bottle of water', *pakèt diri* 'packet of rice', *grena diri* 'grain of rice', *kalite pitye/remò* 'type of pity/remorse', *moso bwa* 'piece of wood', etc. The general availability of *implicit* classifiers with substance-denoting nouns is what makes it look as though "all HC nouns are +count". However, if we assume (cf. Borer 2005; [Wiltschko this volume: chapter XX The syntax of number markers](#)) that counting universally requires a classifier in syntax, this requirement equally applies to English and HC nouns: in both languages, any lexical root must be merged with a classifier feature before it combines with a numeral. It follows that HC in fact has no more "countable" nouns than does English.

Once construed as a sum of atomic entities, e.g. via counting as in (24), any referent may—context allowing— be denoted in HC by a *yo*-marked nominal: this is consistent with our assumption that the plural marker *yo* is a Counter, alongside cardinals:

- (24) a. Fegens achte de tab ak twa chèz. **Tab yo** te chè anpil.
 Fegens buy two table and three chair table PL ANT expensive very
 'Fegens bought two tables and three chairs.
The tables were very expensive.'
- b. Fegens achte de gaz ak twa dlo. **Gaz yo** te chè anpil.
 Fegens buy two petrol and three water petrol PL ANT expensive very
 'Fegens bought two petrols and three waters.
The petrols (= 'jerricans of petrol') were very expensive.'

The HC data suggesting "generalized countability" are in part similar to those of Indonesian—also a non-inflectional-plural language—, described by Dalrymple and Mofu (2012), who argue that all Indonesian nouns may be pluralized (by reduplicative morphology: 25a) or counted (by numerals: 25b):

INDONESIAN

- (25) a. Mereka telah kemasukan air laut terlalu banyak dan
 they have KE.enter.KAN water sea excessive many and
air-air itu sudah berhasil dikeluarkan.
 water-REDUP that have successfully PASSIVE.exit.KAN
 'They have ingested too much sea water, and those sea waters
 [= 'amounts of sea water'] have successfully been taken away.'
 [Indonesian, from Dalrymple and Mofu 2012, ex. (21)]
- b. Seandainya masing-masing dari **dua air laut** tersebut
 if each-REDUP of two water sea TER.mention
 memiliki salinitas (kadar garam) yang berbeda atau temperature...
 have salinity (level salt) REL different or temperature
 'If each of the two mentioned sea-waters [= 'areas of sea water']
 have different salinity levels or temperatures...'
 [Indonesian, adapted from Dalrymple and Mofu 2012, ex. (27)]

These authors provide many attested examples showing that overt classifiers are generally optional with numerals, in Indonesian. They seem to assume that classifiers are syntactically optional in Indonesian—that numerals contain the classifier feature, hence suffice to trigger the atomic denotations expressed by overt classifiers in the English translations (e.g. 'areas of sea water' in (25b)). Interestingly, most of Dalrymple and Mofu's Indonesian examples illustrating "counted mass nouns" seem replicable in HC, as witnessed by the set of examples in (26), our own HC translations of the Indonesian data:

- (26) a. Ou pa chwazi lò sa yo?
 2SG NEG choose gold DEM PL
 'Don't you choose those golds (= 'pieces of gold')?'
- b. Yo vale anpil dlo lanmè men yo te byen retire
 3PL swallow a.lot water sea but 3PL ANT successfully remove
dlo lanmè sa yo.

- water sea DEM PL
'They swallowed a lot of sea water(s) but they successfully removed those sea waters.'
- c. **Lwil yo** soti nan bato a epi yo vin di
oil PL come.out LOC ship DET and.then 3PL become hard
epi yo tounen boul e yo polye plaj la.
and.then 3PL form bubble and 3PL pollute beach DET
'The oils (= 'streams of oil') came out of the ship and they solidified and they formed bubbles and they polluted the beach.'
- d. Dlo te touche po m e li netwaye **labou yo**
water ANT touch skin 1SG and 3SG cleansed mud PL
ki te kouvri kò m nan.
that ANT cover body 1SG DET
'Water touched my skin and cleaned away the muds ('pieces/spots of mud') that covered my body.'
- e. **Tè yo** ki bò rivyè a ap gaye epi y ap tonbe nan rivyè a.
soil PL that along river DET FUT erode and.then 3PL FUT fall LOC river DET
'The soils (= 'amounts/blocks of soil') along the river bank will be eroded and they will flow into the river.'

As regards Indonesian, Dalrymple and Mofu (2012) argue that since all nouns may be pluralized and counted (combined with numerals with no overt classifier), and since all nouns are compatible with the same set of determiners, the Mass/Count distinction is irrelevant for Indonesian. It may be noted, however, that these authors only focus on bounded (atomic, discontinuous, discrete) denotations and do not investigate *unbounded* ones: thus, while we learn from their study that 'sea-water' may be construed as bounded (pluralized or counted), we do not know whether nouns denoting discontinuous entities, such as 'boat', may conversely be construed as *unbounded*, viz. as denoting continuous 'boat stuff', as can lexemes denoting liquids. Should this turn out to be impossible, it would reveal that a contrast does exist between such nouns as 'boat' and 'water', hence that the Mass/Count distinction is actually relevant in Indonesian.

Leaving this issue to Indonesian experts, we return to HC, to show that the Mass/Count distinction is indeed relevant for this language—a claim also made by Aboh and DeGraff (2014), if only in passing (p. 211). Since all nouns seem open to bounded denotations arising from overt or covert classifiers, as shown above, what crucially needs to be investigated is the grammar of unbounded denotations: we address this issue in the next subsection.

3.3. Unbounded denotations

In this section we show that while all sortal nouns are "countable" (combinable with counters with no overt classifier), only a subset of them are also open to a continuous (unbounded) reading. This property may be brought out by two diagnostic tests: (i) only bare sortal nouns with continuous denotations (such as *dlo* 'water') may be pronominalized by the 3SG pronoun *li*; (ii) small-quantity expressions such as *yon ti* 'a little' or *yon ti kras* 'a little bit (of)' strictly select unbounded denotations.

3.3.1. Pronominal anaphora

The examples in (27) through (29) are each made up of two sentences: the first sentence introduces a discourse referent by means of a BNP headed by a sortal noun;

the second sentence contains a third-person pronoun intended to pick up the reference of this discourse topic. We see that the choice of pronoun (singular *li* vs. plural *yo*) is dependent on the lexical features of the bare antecedent: a subclass of bare nouns including *timoun* 'child', *liv* 'book' and *chen* 'dog' may only be pronominalized by the 3PL pronoun *yo*, while such bare nouns as *diven* 'wine', *poul* 'chicken', *papye* 'paper', *dlo* 'water' may also be pronominalized by the 3SG pronoun *li*, with the *yo/li* contrast corresponding to the bounded or unbounded construal of denotation: *yo*-anaphora leads us to construe the referent as a set of atomic units, while *li*-anaphora leads us to construe it as continuous stuff:

- (27) a. Aniz renmen timoun_z men {*li/yo}_z dezòd.
 Aniz like child(ren) but 3SG/3PL unruly
 'Aniz likes children but {*(s)he is/they are} unruly.'
- b. Aniz achte diven_z men {li /yo}_z te chè anpil.
 Aniz buy wine(s) but 3SG/3PL ANT expensive very
 'Aniz bought wine(s) but {it was/they were} very expensive.'
- (28) a. Aprè aksidan an, te gen {liv/chen}_z toupatou nan wout la.¹⁵
 after accident DET ANT have book/dog everywhere on road DET
 Anplis, {*li/yo}_z te mouye.
 besides 3SG/3PL ANT wet
 'After the accident, there were books/dogs all over the road.
 What's more, {*it was/they were} wet.'
- b. Après aksidan an, te gen {poul/papye/gaz }_z toupatou nan wout la.
 chicken/paper/petrol
 Anplis, {li/yo}_z te mouye.
 'After the accident, there was/were chicken(s)/paper(s)/petrol(s)
 all over the road. What's more, {it was/they were} wet.'
- (29) a. Fegens achte boutèy_z men {*li/yo}_z pa anpil.
 Fegens buy bottle but 3SG/3PL NEG plenty
 'Fegens bought bottles but {*it does/they do} not suffice.'
- b. Fegens achte dlo_z men {li/yo}_z pa anpil.¹⁶
 'Fegens bought water(s) but {it does/they do} not suffice.'
- c. Te gen lanmou_z nan lavi Fegens men {li/yo}_z pa dire.
 ANT have love LOC life Fegens but 3SG/3PL NEG last
 'There has/have been love(s) in Fegens's life but {it/they} did not last.'

¹⁵ This example was inspired by data from Cheng *et al.* (2008: 50 sqq.) showing that such nouns similarly cannot be contextually coerced into a stuff-reading in Chinese.

¹⁶ According to the two Haitian-speaking co-authors of this chapter and all of their consultants in Haiti, *dlo* 'water' may be construed as bounded ('bottle/pouch of water') even when it is not combined with a counter (as it is in *de dlo* 'two waters' or *dlo yo* 'the waters'). This judgment is at odds with Aboh and DeGraff's (2014: 211) assessment of *Mwen vle dlo*, unambiguously translated by these authors as 'I want water'. In the HC grammar we are describing, *Mwen vle dlo* may ambiguously translate as 'I want water' (an unspecified quantity of water stuff) or 'I want one or more waters' (an unspecified number of water units —bottles, pouches, etc.).

The ill-formedness of *li*-anaphora in (27a), (28a), (29a) may seem in conflict with our assumption that BNPs are unspecified for number: if a bare argument such as *timoun* 'child', *chen* 'dog', *liv* 'book' tells us nothing about the quantity of entities at stake (cf. (2c), (17a), (20a)), why is anaphora restricted to the plural pronoun in (27a) and (28a)? We assume that since the plural feature in the pronoun is not inherited from a plural feature in the bare antecedent—BNPs being number neutral, as argued above—it must be triggered by another property distinguishing the nouns in (27a)/(28a)/(29a) from those in (27b)/(28b)/29b). Our examples show that noun phrases headed by lexemes such as *timoun* 'child', *liv* 'book', *chen* 'dog', *boutèy* 'bottle' strongly resist the construal of their referent as an unbounded mass of continuous stuff. Their referent needs to be construed as bounded—viz. made up of discrete entities forming either a singleton or a sum. Since the BNP antecedents of (27a), (28a), (29a) contain no singularity marker (e.g. *yon* 'one, a') triggering a singleton reading, their referents are (by virtue of the Blocking Principle) construed as sums of discrete entities, viz. as non-singular: they are consequently pronominalized by *yo*.

The BNP antecedents in (27b), (28b) and (29b) are on the other hand headed by nouns such as *diven* 'wine', *poul* 'chicken', *papye* 'paper', *lanmou* 'love', which are readily construed as denoting unspecified quantities of unbounded, expandable matter, whether concrete (*dlo* 'water') or abstract (*lanmou* 'love'): in this case they are immune to countability and trigger default number on their anaphoric pronoun, spelt out as *li*. The data show, however, that this class of BNP antecedents may also be construed as denoting discrete instances of continuous matter, in which case they are pronominalized by *yo*, like the BNPs headed by the *timoun* class. Since *yo*-pronominalization is available regardless of the lexical noun heading the BNP antecedent, the constraint brought out by our examples primarily bears on unbounded readings (*li*-pronominalization) rather than on bounded ones.

Lexemes which resist continuous readings include those of human entities, of animals and plants not normally consumed as food (e.g. *chen* 'dog', *chat* 'cat', *flè* 'flower', *pyebwa* 'tree' but not *poul* 'chicken', *pwason* 'fish', *mango* 'mango')¹⁷, and of artefacts such as *liv* 'book', *boutèy* 'bottle', *machin* 'car', *kay* 'house', etc. Lexemes open to continuous denotations include those identifying solid, liquid or grainy concrete substances whose subcomponents are or may be functionally disregarded (e.g. *bwa* 'wood', *wòch* 'stone', *papye* 'paper', *vyann* 'meat', *dlo* 'water', *labou* 'mud', *gaz* 'petrol', *diri* 'rice', *sab* 'sand') and of gradable¹⁸ abstract properties (e.g. *remò* 'remorse', *lanmou* 'love', *pasyon* 'passion', *sajès* 'wisdom'). Should we regard Countability as arising from a functional feature <u> creating units (semantic atomicity, in Rothstein's 2010 terms),

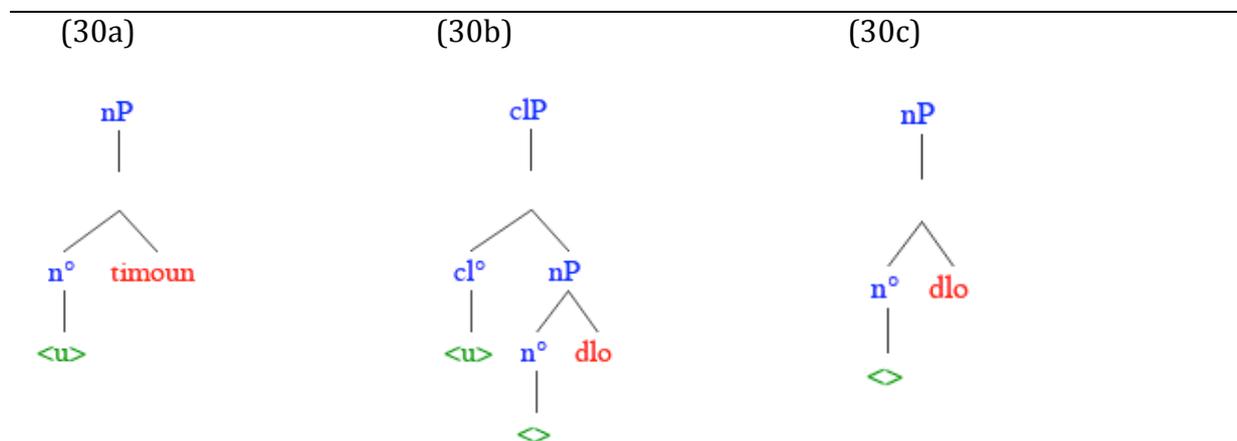
¹⁷ The substance-reading of nouns denoting animals or plants "not normally consumed as food" may actually be coerced counter cultural conventions, but only in lexical and/or pragmatic contexts specifically calling for a "food" reading, e.g.:

- (i) M manje chen maten an. Li te bon anpil.
1SG eat dog morning DET. 3SG ANT good very
'I ate dog this morning. It was very good.'
- (ii) Restoran sa a bay chen paske pa gen vyann.
restaurant DEM DET give dog because NEG have meat
'This restaurant serves dog because no meat is available.'

But in other contexts such as (28a) below, nouns such as *chen* 'dog' strongly resist unbounded denotations, contrasting with, e.g., *poul* 'chicken'.

¹⁸ Cf. Nicolas (2010) on the Mass properties of such nouns.

we may, adapting Wiltschko (chapter XX, *The syntax of number markers*), assume that $\langle u \rangle$ may occur in two different syntactic heads in the architecture of the Haitian DP: with roots such as *timoun*, $\langle u \rangle$ is inserted in the n° head, viz. within the lexical domain, whereas with roots such as *dlo*, $\langle u \rangle$ is inserted in CL° , the head of an optional Classifier Phrase placed a step higher in the syntactic tree. This lay-out captures the idea that the $\langle u \rangle$ feature is an obligatory component of noun phrases headed by *timoun*, but only an optional feature for noun phrases headed by *dlo*. Correlatively, only noun phrases headed by the *dlo*-type may freely have unbounded denotations (when the Classifier head fails to occur), whereas noun phrases headed by the *timoun*-type may not be coerced into Mass interpretations—viz., may not undergo what Pelletier (1979) calls semantic "Grinding" in HC,¹⁹ as illustrated above by (28a), since the n° head is obligatorily present in NP syntax. Bare sortal noun phrases, although unspecified for Number (cf. section 2.2), may thus contain a lexical $\langle u \rangle$ feature in n° (30a), a syntactic $\langle u \rangle$ feature in CL° (30b), or no $\langle u \rangle$ feature at all (30c), and discourse anaphora is sensitive to the presence or absence of $\langle u \rangle$, whatever its source: $\langle u \rangle$ triggers *yo*-anaphora, while the absence of $\langle u \rangle$ triggers default *li*-anaphora.



BNPs headed by *timoun*-type nouns always contain $\langle u \rangle$ (in n°), hence are always pronominalized by *yo* (27a//30a), while BNPs headed by *dlo*-type nouns (27b) trigger *yo*-anaphora if they contain $\langle u \rangle$ (in CL°) (30b) and default *li*-anaphora if they do not (30c). Furthermore, a minimal noun phrase cannot contain more than one $\langle u \rangle$ feature: thus, *twa timoun/liv* 'three child(ren/book(s))' cannot be construed as 'three units [groups, teams; boxes] of atomic children/books', which would arise from combining $\langle u \rangle$ in CL° with $\langle u \rangle$ in n° .

BNPs containing a $\langle u \rangle$ feature, whether in CL° or in n° , are semantically construed as Kinds composed of atomic units and correlatively exhibit the properties expected of semantic plurals, e.g. reciprocals (31a,b) or distributivity (31c):

- (31) a. Chen goumen youn ak lòt.
 dog fight one with other
 'Dogs fight with one another.'
- b. Gaz toujou melanje youn ak lòt.
 petrol always mix one with other
 Lit. 'Petrols always mix with one another.'

¹⁹ The same restriction is reported for Chinese by Cheng *et al.* (2008), cf. fn 13.

- (jerricans/types/... of petrol)
- c. Filozòf sa a etidye pasyon moun youn dèyè lòt.
 philosopher DM DET study passion people one after other
 'This philosopher studies human passions one after the other.'

3.3.2. Small quantity

Small-quantity markers provide a negative diagnostic test for Countability. Representatives of this class in HC are *yon ti* 'a little', *yon ti kal* 'a little piece', *yon ti zing* 'a tiny bit', *yon ti kras* 'a little bit', and *yon ti tak* 'a drop'. All are formed of *ti* (denoting smallness) preceded by *yon*, construed as indefinite singular ('a(n)') and followed in all cases but one by an overt massifier-type classifier. These small-quantity markers are characteristically incompatible with atomicity—the <u> feature: *yon ti* expresses small quantity in (32a-iii, 32b-i, 32c), where denotation is construed as continuous, but in the presence of <u> *yon ti N* means 'a/one small/little N', with *ti* a prenominal adjective expressing small size rather than small quantity, whether <u> is inserted in n° (32a-i) or in CL° (32b-ii).²⁰

- (32) a. Fegens jwenn **yon ti chen**.
 Fegens find *yon ti* dog
 (i) 'Fegens found a little/small dog.'
 (ii) *'Fegens found a little (quantity of) dogs.'
 (iii) ?'Fegens found a little (quantity of) dog (food).' [cf. fn.15]
- b. Fegens jwenn **yon ti dlo**.
 (i) 'Fegens found a little (quantity of) water.'
 (ii) 'Fegens found a little/small {bottle/pouch...} of water.'
- c. Menm **yon ti pitye** li pa genyen pou nou.
 even *yon ti* pity 3SG NEG have for 1PL
 '(S)he doesn't even have a little pity for us.'

Yon ti kras and *yon ti tak* both denote small quantity, with different selectional restrictions (e.g. *tak* only with liquids — an open issue), and *yon ti zing* expresses VERY small quantity:

- (33) a. Gen *yon ti* {*tak/kras/zing} vyann ki rete nan frijidè a.
 have a little *tak/kras/zing* meat that left in fridge DET
 'There is a (tiny) bit of meat left in the fridge.'
- b. Gen *yon ti* {tak/?kras/*zing} lèt ki rete nan frijidè a.
 'There is a bit/drop of milk left in the fridge.'
- b. *Gen *yon ti* {tak/kras/zing} liv anndan bibliotèk la.
 have a little *tak/kras/zing* book inside library DET
 Lit. 'There is a little books inside the library.'

All these small-quantity markers select continuous denotations—they are incompatible with atomicity (the <u> feature). In this respect, small-quantity markers contrast, as a class, with high-quantity expressions such as *anpil*, *yon pakèt*, *yon barik*, *yon bann*, *yon*

²⁰ Note that English *a little N* is similarly ambivalent between small size, where *little* alternates with *small* (*a little/small house*) and small quantity, where it does not (*a little/*small water*).

mago, yon chay... ('a lot', 'a bunch', 'a bucketful', 'a heap', 'a load', etc.) which seem insensitive to the presence/absence of the <u> feature:²¹

- (34) a. Fegens jwenn **anpil {liv/dlo}**.
 Fegens find a.lot book/water
 'Fegens found a lot of {books/water(s)}.'
 b. Fegens gen **yon pakèt {lanmou/pwoblèm}** nan lavi l.
 Fegens have a bunch love/problem LOC life 3SG
 'Fegens has a bunch of {love(s)/problems} in his life.'

3.3.3. Ambivalent classifiers

This subsection discusses types of lexical nouns which appear as ambivalent with respect to Countability. We derive this ambivalence from the variable structural position and semantic construal of the classifier feature <u> they combine or may combine with.

3.3.3.1. Dual kinds

Nouns denoting entities coming in pairs, such as *soulye* 'shoe(s)', *chosèt* 'sock(s)', *zanno* 'earring(s)', *minòt* 'handcuff(s)', *altè* 'dumbbells', have a lexical <u> feature positioned in n°, as witnessed by the unacceptability of *li*-anaphora in (35) :

- (35) Fegens vle achte soulye_z men {*li/yo}_z two chè.
 Fegens want buy shoe but 3SG/3PL too expensive
 'Fegens wants to buy shoes but they are too expensive.'

Noun phrases headed by such nouns are however ambiguous with respect to the singleton or dual construal of their atomic unit: thus *yon soulye* may be understood as 'one single shoe' or 'one pair of shoes', depending on context:

- (36) a. Aniz vle achte yon soulye men li two chè.
 Aniz want buy a shoe but 3SG too expensive
 'Aniz wants to buy {a pair of shoes/?a shoe} but it is too expensive.'
 b. Fegens pèdi yon soulye pandan l t ap kouri dèyè bis la.
 Fegens lose a shoe while 3SG ANT IPFV run behind bus DET
 'Fegens lost a {?pair of shoes/ shoe} while he was running after the bus.'

We assume that this ambivalence lies in the semantic construal of the <u> feature itself which, with this class of lexemes, may identify two types of atomic units: singleton or pair. This ambiguity is clearly lexicon-based, since it only concerns a small designated class of lexical roots: thus, *yon liv* can only be construed as 'one book', never as 'one pair of books'.

3.3.3.2. Chicken(s), beans and rice

²¹ The same contrast between small- and high-quantity expressions seems to be a common pattern in Romance and Germanic:

- (i) a. He found a little {water /*books}
 b. He found a lot of {water/books}.

Nouns denoting animals ('chicken') or plants ('mango') commonly turned into meat or food stuff are a priori open to continuous or discontinuous readings. We assume that <u> is optionally present in n° with these lexemes. If <u> occurs in n°, it identifies the discontinuous animal or vegetal entity from which the stuff is drawn ('chicken-bird', 'mango-fruit') (37a); if <u> does not occur in n°, it either fails to occur altogether, triggering a continuous stuff-reading pronominalized by *li*: (37b)) or it occurs in CL°, triggering a unit-of-stuff reading as in (37c):

- (37) a. Fegens achte de poul nan mache (a).
 Fegens buy two chicken LOC market DET
 'Fegens bought two chickens at the market (under discussion).'
- b. Jodi a yo sèvi poul_z men li_z te twò kuit.
 today 3PL serve chicken but 3SG ANT overdone
 'They served chicken today but it was overdone.'
- c. Nou kòmande de poul ak de pwason.
 1PL order two chicken and two fish
 'We ordered two chickens and two fish (portions of).'

A noteworthy subclass of lexemes are those denoting grainy stuff composed of separable atomic units, e.g. *diri* 'rice', *sab* 'sand', *pwa nwa* 'black beans', *ze* 'egg(s)', which also allow three types of interpretation, as witnessed by (38):

- (38) a. Atis la kole diri_z sou tablo li a, men yo_z tonbe.
 artist DET paste rice on painting 3SG DET but 3PL fall
 Lit. 'The artist pasted rices on his picture, but they fell off.'
 (grains of rice)
- b. Aniz vle achte diri_z men li_z chè anpil.
 Aniz want buy rice but 3SG expensive plenty
 'Aniz wants to buy rice but it is very expensive.'
- c. Aniz achte diri_z nan makèt men yo_z pa anpil.
 Aniz buy rice LOC supermarket but 3PL NEG plenty
 Lit. 'Aniz bought rices at the supermarket but they do not suffice.'
 (packets of rice)

We assume that with this class too, <u> is optionally inserted in n°: if it is, the lexically-constrained unit of counting identified by <u> is the "grain" atom characteristic of the Kinds identified by such roots (38a); if <u> is absent in n°, it either fails to occur altogether, which triggers a continuous stuff-reading (38b), or it occurs in CL°, giving rise to a unit-of-stuff reading, as in (38c).

The lexemes *founiti* 'school supplies, stationery' and *materyèl* 'supplies, equipment', whose French etyma are respectively an inherent plural (*fournitures*) and a

²² In plural-inflection languages such as English, "restaurant talk" is assumed to favor coercion of substance-denoting nouns into "Count" readings, cf. Wiese and Maling (2005). In Haitian, however, the possibility of combining substance-denoting nouns with counters is not restricted to this type of discourse, as shown above. The 'unit of stuff' semantic effect arising from (37c) is no different in nature from that observed in, e.g., (22b,c,e,f) or (26).

number-neutral "aggregate" (*matériel*) (Joosten 2010) interestingly pattern in HC like the grainy-kind class:²³

- (39) a. Aniz mete twa founiti/materyèl sou tab la.
 Aniz put three *founiti/materyèl* on table DET
 'Aniz put three school supplies/items of equipment on the table.'
- b. Aniz vle achte {founiti/materyèl}_z men li_z chè anpil.
 Aniz want buy *founiti/materyèl* but 3SG expensive very
 'Aniz wants to buy stationery/equipment but it is very expensive.'
- c. Aniz achte twa ti founiti/ materyèl pou twa pitit li yo.
 Aniz buy three small *founiti/materyèl* for three child(ren) 3SG PL
 Lit. 'Aniz bought three small stationeries/equipments
 for her three children.'
 (small items of {stationery/equipment} or small {stationery/equipment} kits)

In (39a), the unit of counting is construed as a root-dependent atom similar to the grain of rice in (38a): we assume that <u> is inserted in n° and triggers atomicity at the lexical level, as with the *timoun* class. In (39b), default singular pronominal anaphora (*li*) indicates that the bare antecedent *founiti/materyèl* is construed as continuous (unbounded), as is *diri* 'rice' in (38b): we derive this interpretation from the absence of the <u> feature in both n° and CL°. In (39c), the <u> feature required by counting either occurs in n° (providing an atomic bounded unit: 'item of stationery') or in CL°, triggering a unit-of-stuff reading ('stationery kit').

Chierchia (2010) predicts that *furniture*-type aggregate nouns combining Mass properties upstairs (neutral number/singular morphology: *I need **furniture***) with Count properties downstairs (delimiting modifier: *I need **small furniture***) can only exist in languages having number inflection. Haitian does not disconfirm this claim: English-type aggregate nouns have no equivalents in this language; HC noun phrases either contain or do not contain a classifier feature <u> whose position in syntactic structure determines semantic construal, and the nouns *founiti/materyèl* 'stationery/equipment' and *diri* 'rice' have exactly the same type of ambivalence with respect to Countability.

4. Conclusion

This chapter has focused on the Countability issue in Haitian Creole, whose "counters" include numerals and the non-inflectional plural marker *yo*, which is strictly restricted to pragmatic-definite noun phrases. We first argued that despite appearances, HC nouns behave exactly like English ones with respect to counting: all may combine with counters, but counting requires in all cases a unit of count in the interpretation—a <u> feature. HC only contrasts with English in its tolerance of *covert* <u> features with stuff-denoting nouns. We have dismissed the idea that HC should have "more count(able) nouns" than English in its lexicon, as well as the assumption (suggested by surface properties) that the Mass/Count distinction should be irrelevant for HC, as proposed by Dalrymple and Mofu (2012) for Indonesian, a language where all nouns similarly seem combinable with counters. We have presented two diagnostic properties separating stuff-denoting from entity-denoting noun phrases in HC: discourse pronominalization of bare sortal nouns, and small-quantity markers. We have shown

²³ *Founiti* is assessed as an HC word but perceived as more acrolectal than *materyèl*.

that the HC data are easily fitted into the DP architecture proposed by Wiltschko ([chapter XX Wiltschko](#)), which assumes that classifier features may occur in more than one syntactic head.

Although the description adopted here for HC relates the \pm bounded character of nominal denotations to syntactic structure—in the spirit of Borer (2005) and Wiltschko ([chapter XX Wiltschko](#))—the data clearly indicate that syntax needs to be tightly articulated with lexical features. Lexical roots cannot be regarded as completely inert with respect to denotation, since a subclass of them (e.g. *liv* 'book') simply cannot produce stuff-interpretations in HC, whatever the activated syntax. Although stuff-readings are assumed to be available for some number-inflectable ("count") nouns in English (*There was dog all over the road*) or French (*Il y avait du chien partout sur la route*), even those are in fact lexically restricted (*?There was book all over the road*): the contrast between English/French and HC (or Chinese, cf. Cheng *et al.* 2008), in this respect, is probably smaller than one might think.

DP syntax thus cannot operate without a dictionary specifying which lexical roots require a classifier feature (in n°) and are correlatively restricted to bounded denotations (e.g. *liv* 'book' or *soulye* '(pair of) shoe(s)' in HC), and which ones do not and are correlatively *also* open to unbounded ("Mass", classifier-less) readings, e.g.: *poul* 'chicken bird' or 'chicken meat'; *founiti* 'school supply' or 'stationery'.

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