The term “associative plural”, in its broad sense, refers to constructions of the form NP+X with X being a plural element, denoting a plural entity associated with the reference of the NP. In this paper, I exemplify the Chinese -men associative plurals to demonstrate that an analysis treating -men, the so-called plural ending, as a classifier incorporating number, accounts for the distinctive properties of -men phrases such as humanness, plurality and definiteness, showing that the relevant notion of plurality involved in associative plurals is not exceptional, contrasting with Nakanishi & Tomioka (2004)’s claim that an exceptional plurality of non-uniformity is involved in Japanese -tati associatives. Associative plurals are instead argued to be a special case of definite nominals with an independent DP licensing the (in)definiteness of the nominal. A feature-checking approach to DP interpretation in Chinese is also explored in the paper.

1. Introduction

The term “associative plural”, in its broad sense, refers to constructions of the form NP+X with X being a plural element, carrying a denotation of a plural entity associated with the reference of the NP. For example, there is in Afrikaans the form NP+hulle where hulle is a plural pronoun and the NP is person-denoting. So Jan-hulle is ‘John-they/them’ (den Besten 1996), meaning “John and his folks”. Not surprisingly, this type of plural raises a question as far as number typology is concerned: is the associative plural a different type of number functioning in parallel with the ordinary plural? Indeed, Nakanishi & Tomioka (2004) take this stand and claim that Japanese -tati associative plurals cannot be accommodated by the standard semantics of plurality in general even when the plural ending -tati is attached to a common noun; -tati instead “creates a plural whose extension is non-uniform” (p.135). In this regard, Corbett (2000) demonstrates that associativity should be dissociated from number and treated as a separate category. This is based on the observation that there are different ways of expressing associative...
meaning. For example, a combination of associative and number is found in Hungarian and Central Pomo, a distinct associative is used in Central Alaskan Yup'ik and in Paumari number alone is used to this end. However, while associativity is argued to be recognized as a distinct category, exactly what the nature of this category is and how it interacts with number remains unclear.

Interestingly, associatives are also found in Chinese, a language which is not rich in inflectional morphology and is usually taken to lack number marking. Specifically, a morpheme -men is found attached to a pronoun or proper name to form an associative, as illustrated in (1a-c, 1d(i)):

(1) a. wo-men  
   I-MEN ‘we’
b. ni-men  
   you-MEN ‘you (pl.)’
c. ta-men  
   he/she-MEN ‘they’
d. XiaoQiang-men  
   XiaoQiang-MEN
   i. ‘XiaoQiang and other people related to him’
   ii. ‘the group of people all named XiaoQiang’

Furthermore, -men also appears following a common noun (restricted to human nouns) and the expression is obligatorily definite and plural but plural in the usual sense without an associative meaning, as illustrated in (2) and (1d(ii)) where the proper name XiaoQiang is used as a common noun (CN):

(2) a. Xiaozhang xiang jian jiazhang-men.  
   headmaster want see parent-MEN
   ‘The headmaster wanted to meet the parents.’

   parent-MEN leave LE
   ‘The parents have left.’

What seems interesting here is that -men is found in both associatives and CN+men. Is -men number? How is associativity realized in Chinese and how does it interact with number? Answers to these questions, I believe, will shed light on the issues of associativity and number in general. In this paper, I present a feature-checking approach to DP structures and specifically argue that -men is a person classifier incorporating number. Instead of a new type of number or an independent category, associativity instantiated by NP+X associatives results from the licensing of (in)definiteness by the NP which denotes a presupposed subset of the associative reference.

In section 2 of this paper I will illustrate that -men associatives are syntactic rather than lexical. Section 3 gives a brief review of Li (1999) and points out that the analysis of -men as the counterpart of the English -s fails to capture the distinctive definiteness and person variation of CN+men constructions and therefore calls for a new analysis. In section 4 -men is shown to be better analyzed as a person classifier incorporating number which in CN+men licenses number and person, rendering the expression plural and
definite. A comparison between Chinese -men, Japanese -tati and Afrikaans -hulle associatives is made in section 5. Section 6 concludes the paper and discusses the implications the present study has on the general issues of associativity and number.

2. Lexical or syntactic?

-Men has been a topic of interest and controversy for its distinctive properties of number and definiteness. As is well known, Chinese is not rich in inflectional morphology and agreement. In Chinese the interpretable feature of number is neutral in that there is no apparent and systematic number marking on nouns; bare nouns can be interpreted as either singular or plural depending on the context, as illustrated in (3):

(3) a. Xiaozhang yao jian jiazhang.
   headmaster want see parent
   ‘The headmaster wanted to meet a/the parent(s).’

   b. Jiazhang zou le.
   parent(s) leave LE
   ‘The parent(s) has/have left.’

In terms of definiteness, bare NPs can be interpreted as either definite or indefinite in post-verbal positions as in (3a) and mostly definite in preverbal positions as in (3b). NP+men constructions, for instance as in (1-2), are obligatorily interpreted as plural and definite. Despite the apparent connection with plurality, the unexpected definiteness requirement for -men constructions, together with some other distinctive features such as restriction on humanness and the incompatibility with counting, as illustrated in (4) and (5), respectively, has led many linguists to suggest that -men is not a simple counterpart of the English plural ending -s (see Li 1999 and Iljic 2005 for detailed discussions in this respect).

(4) *diannao-men
    computer-MEN
    ‘the computers’

(5) *san-ge jiazhang-men
    three-CL parent-MEN

One speculation could be that -men is an independent word meaning “group” and -men constructions are a result of compounding. Compounding, however, seems to be problematic as far as -men associatives are concerned. The immediate question that arises is: how is a pronoun or proper name as in (1) incorporated into a compound if NP+men involves compounding?

If we take pronouns and proper names as instances of CN (which is in fact possible in Chinese as will be demonstrated later) and follow that CN+men is a compound referring to ‘the group of X with the property denoted by the CN’, then pronoun/proper name+men, for example, XiaoQiang-men as in (1b), will only have a
homogeneous reading as “the group of people all named XiaoQiang”. An associative meaning such as “XiaoQiang and other people associated with him” is by no means available to the compound because the interpretation of proper names (as well as pronouns in Chinese) as individual-referring is resulted from syntactic derivation while compounding on the other hand should be taken as an operation on the lexical level. Conversely, if an associative meaning is indeed available to pronoun/proper name+men, then why isn’t it possible for CN+men if -men performs the same function in both cases? In other words, why can’t jiazhang-men mean ‘the group of people consisting of the parent and other people who may or may not be parent’ since a bare noun can also be definite as illustrated in (3)? The fact that pronoun/proper name+men and CN+men have different behavior suggests that compounding is short of explanatory power for NP+men constructions in general.

Another piece of evidence against the compounding approach lies in -men associatives. It can be seen that in -men associatives, the NP can be a coordinated DP, as illustrated in (6a-b), quoted from Iljic (2001):

(6) a. Sigouzihe Xiaotu-men
    Sigouzianand Xiaotu-MEN
    ‘the group of Sigozi and Xiaotu (and someone else named Xiao Shun)’
    (Ōta 1958: 346)

    b. Ai, yaoshi wo zao chusheng liang-bai nian jiu hao le!
       oh if I early born two-hundred year JIU good LE

       Dinglü shenme de, dou jiao Niudun Wate-men gei
       law what DE DOU Pass Newton Watt-MEN PASS

       faming wan le…
       invent finish LE
       ‘Oh, if only I were born two hundred years earlier! All laws and so on
       have already been invented by Newton, Watt and the rest…’
       (Hao ertong, 4:8, 1998)

If -men can appear after a coordinated DP, denoting a group consisting of the referent by the DP and others related to him/her, it’s more likely that the structure is syntactic rather than lexical.

3. **-Men is more than number**

   Claiming that -men is a plural morpheme, Li (1999) tries to propose a unified analysis of -men and the English plural -s, taking both as marking plurality expressed as Number and heading a Number Phrase. In this model, the English *three students* will have a tree structure like the one shown in (7), in which student moves up to Num to realize or check the plural feature surfacing as -s:
The Chinese equivalent of *three students* will have the structure shown in (8) where the classifier projects a ClP between NumP and NP:

(8)  
```
(7)            NumP
   Spec     Num'         NP
     Three   Num       Pl
                  student
```

(Li 1999: 86)

It is argued that this very ClP prevents the Pl feature from realizing on the noun because the latter cannot move across the Cl head to be suffixed with *-men* in the Num head. Therefore, “the only option left is for the Pl feature to be raised to D and suffixed to the nominal element in D, deriving the generalization that the Pl feature is suffixed (realized as *-men*) to the element in D” (p.88) in Chinese. This possibility, as we can see, is only restricted to the case of a definite bare noun which has raised from N to D through an empty Cl and Num between them. Although Li does not provide an illustration for this derivation, I assume the derivation of *xuesheng-men*, the Chinese equivalent of *the students*, should resemble the representation given in (9) under Li’s analysis:

(9)  
```
(8)            DP
   D           NumP
       Spec     Num'         NP
         san   Num            ClP
           Pl     Cl        NP
                   ge     xuesheng
```

(Li 1999: 87)
In the case of proper name+men, the ambiguity of meaning as is illustrated in (1d) is accounted for by distinguishing between proper names base-generated in two different positions within a DP structure: the associative meaning or a collective reading in Li’s term is related to a proper name base-generated in D (referring to a definite individual); the homogeneous or plural reading is derived when a proper name is base-generated in N (referring to the people with the same name) and moved to D. It can be seen that the plural reading is derived in much the same way as when a definite common noun is suffixed with -men, as described above. As to pronoun+men, Li suggests that pronouns, like proper names, can be generated in either N or D and suffixed with -men.

However, some potential problems are found with the above analysis. The first one has to do with the adequacy of taking -men as mere number. For Li, her analysis is more about where plurality is realized: it is realized in D rather than in N in a classifier language like Chinese due to the intervening classifier projection between NP and NumP. Therefore, -men is readily suffixed to pronouns and proper names but not to common nouns in general. But in cases where common nouns move from N to D they are able to be suffixed with -men. However, if that is how -men works, then there should be no such constraint on the category of the N as being human nouns since all common nouns are in principle able to undergo N to D movement.1 Moreover, this way of treating -men as number only predicts that there is no difference between CN+men and the definite bare human nouns interpreted as plural – both are plural and definite and human-referring. This prediction, nevertheless, seems to be wrong. Some difference indeed exists between the two and this is what Iljic (2005) has referred to as person. While Iljic’s observation in this respect is restricted to pronouns and the use of CN+men in allocution as a so-called substitute for the personal pronoun you, as in (10), I’d like to expand the context of CN+men to be inclusive of all three person values, as illustrated in (11):

(10) Pengyou-men!  
Friend-MEN  
‘(Dear) friends!’ (Iljic 2005: 79)

(11) -men and person variation

Dai jiazhang-men dao xiaozhang bangongshi qu, keyi ma?  
bring parent-MEN arrive principal office go, allowed MA

a. 1st person interpretation of jiazhang-men  
‘Could you bring us parents to the principal’s office?’  
(In this case, the speaker is one of the parents.)

b. 2nd person interpretation of jiazhang-men  
‘May I bring you parents to the principal’s office?’  
(In this case, the parents are the addressee.)

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1 Even though one might argue that the restriction of -men to pronouns, proper names and human nouns is an instance of the Constraint of the Animacy Hierarchy on the singular-plural distinction (Corbett, 2000), that is, the distinction must affect a top segment of the Animacy Hierarchy including speaker, addressee, 3rd person, kin and human, the explanation for the contrast in terms of person between CN+men and definite bare plural is still in order.
c. 3\textsuperscript{rd} person interpretation of jiazhang-men
   ‘Could you bring the parents to the principal’s office?’
   (In this case, the speaker and the addressee are both independent of the parents.)

In (11a-c), the same CN+men of jiazhang-men assumes 1\textsuperscript{st}, 2\textsuperscript{nd}, and 3\textsuperscript{rd} person respectively. In contrast, if it is replaced with a bare noun jiazhang interpreted as definite only a 3\textsuperscript{rd} person interpretation is available, as illustrated in (12):

(12) Dai jiazhang dao xiaozhang bangongshi qu, keyi ma?
   bring parent arrive headmaster office go, allowed MA
   ‘Could you bring the parent(s) to the headmaster’s office?’

What can be seen here is that CN+men can have varied person values depending on the context while definite bare nouns have 3\textsuperscript{rd} person only. What caused the difference? The answer seems to lie beyond Li’s suggestion of attributing -men’s connection with person to its landing position in D which is said to be the canonical position for pronouns and therefore has the feature for person (Li 1999, p. 94). Under Li’s approach a definite bare noun jizhang ‘the parent(s)’ should have moved from N to D and should also have a connection with person in the same way as -men does. This, however, is not the case. What seems to be true is that -men’s close association with person is an inherent property which should not be captured by its relative position within the nominal structure alone.

Turning to pronoun/proper name+men, two base positions have been postulated by Li (1999) for pronouns and proper names: N for a plural reading and D for an associative reading. However, regarding the positioning of pronouns and proper names in Chinese, there is evidence showing that they have the syntax of common nouns. They can be preceded by a demonstrative-numeral-classifier combination or by a possessive, as illustrated in (13):

(13) a. Guojing shuo ta kandao-le liang-ge Hufei.
   Guojing say he see-LE two-CL Hufei
   ‘Guojing said that he saw two Hufei’s’
   (Cheng & Sybesma 1999: 523)

   b. Cong nei-ge jing-zi wo keyi kandao wu-ge wo.
      from that-CL mirror I can see five-CL I
      ‘From that mirror, I can see five copies of myself (five I’s/me’s).’
      (Cheng & Sybesma 1999: 538)

   c. Wo de ta/XiaoQiang bi ni de ta/XiaoQiang congming.
      I DE he/XiaoQiang BI you De he/XiaoQiang smart
      ‘My man/XiaoQiang is smarter than yours.’

It can be seen that while Chinese proper names behave similarly to English ones, Chinese pronouns, unlike their English counterparts, are more likely to be NPs like proper names. If we follow the generalization that proper names in English are base-generated in N and
able to raise to D to be realized as individuals (Chierchia 1998, Longobardi 1994), there is good reason to claim that proper names and pronouns in Chinese are also base-generated in N. In other words, contrasting Li’s proposal of distinguishing between two types of pronouns/proper names, I suggest that they should be treated alike. A direct consequence of this modification, in the analysis under discussion, is the inadequacy of getting an associative by attaching -men to an element base-generated in D.

4. -Men as classifier incorporating number

4.1. -Men and person

In the last section I have shown that CN+men is unexpectedly accessible to 1st and 2nd person assignment. Now that bare nouns, when interpreted as definite, do not have this property, it is fair enough to say that the person variation in CN+men is an inherent property of -men. To determine the status of -men, a rather straightforward method is to look into the element(s) in complementary distribution with it. As was illustrated in (4), -men is incompatible with the quantity-expressing [number+classifier] preceding a noun. This at least suggests three possibilities: first, -men is number; second, -men is classifier; or third, it is a combination of both. The first choice is represented by Li (1999) and has been shown in section 2 to be inadequate to account for the distinctive behavior of -men. Despite this, the fact that -men constructions are necessarily plural, no matter in what sense, suggests that number indeed is an inherent property of -men that should be integrated into its grammar. This requirement eliminates the second choice and narrows down our choices to the third one, that is, -men is a combination of number and classifier in a structural sense. Treating -men as a classifier first and foremost accounts for the restriction of -men phrases to human nouns since classifiers are usually selective of the nouns they combine with. Furthermore, there is evidence that -men is not the only element that contributes to person variation in Chinese. For example, the classifier wei, which is also restricted to human nouns and appears after a numeral or demonstrative as in (14), can also cause a nominal to be definite and have varied person values, as illustrated in (15):

(14) a. liang-wei jiazhang  b. zhe-wei jiazhang
    two-CL parent       this-CL parent
        ‘two parents’      ‘this parent’

(15) Xiansheng-men tongyi le, keshi liang-wei nǚshi bu tongyi.
gentleman-MEN agree LE but two-CL lady not agree

a. 1st person interpretation of liang-wei nǚshi
   ‘You gentlemen have agreed to it, but we two ladies object it.’
   (In this case, the speaker is one of the ladies.)

b. 2nd person interpretation of liang-wei nǚshi
   ‘We gentlemen have agreed to it, but you two ladies object it.’
   (In this case, the two ladies are the addressee.)
In (15a-c), the expression *liang-wei nǐshí* ‘two ladies’ has 1\textsuperscript{st}, 2\textsuperscript{nd}, and 3\textsuperscript{rd} person respectively just like *-men* in (11a-c). Now that *-men* has the same property of person as *wei*, which is categorized as classifier, it is not far fetched to suggest that *-men* is also a kind of classifier. What distinguishes the two from each other is that *wei* does not have inherent number, i.e. singularity or plurality, while *-men* is a combination of classifier and number and inherently denotes plurality. Interestingly, another element *lia*, which incorporates dual number as in (16), may also fall into the same category of person-denoting classifiers:

\begin{align*}
(16) & \quad \text{a. ni-lia} \quad \text{b. wo-lia} \quad \text{c. ta-lia} \\
& \quad \text{you-LIA} \quad \text{I-LIA} \quad \text{he-LIA} \\
& \quad \text{‘you two’} \quad \text{‘we two’} \quad \text{‘they two’}
\end{align*}

\section*{4.2. CN+-men}

Before looking at the syntax of *-men*, I’d like to introduce a feature-checking approach to the interpretation of DPs although a more detailed exploration of the nominal structures will not be attempted in this paper. Following the insights of Borer (2005), I also assume that semantic interpretations are determined by syntactic structures. In particular, the following assumptions are made:

1. The grammar consists of lexical items, functional items, affixes and abstract functional heads:
   - Functional heads have a bundle of uninterpretable features including semantic features (e.g. $\phi$ features) and categorical features.
   - Lexical items are not categorically specified in the lexicon.
   - Functional items consist of limited and specified sets of interpretable features.
   - Like functional items, affixes also have specified interpretable features, either semantic or categorical. But they have to be bound at Spell-Out.

2. Functional heads need to be valued during derivation:
   - The categorical features on functional heads are valued by its sister when Merge applies; upon merging with a functional head, a lexical item is categorically specified. For example, when it merges with a functional head with an uninterpretable N feature, it is specified as a noun; when the merger is a functional head with an uninterpretable V feature, the lexical item is specified as a verb.
   - Upon being specified categorically, lexical items assume the relevant set of interpretable semantic features accordingly.

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\footnote{Thanks to Alan Yu for bringing this to my attention.}
The uninterpretable semantic features on functional heads are valued by categorized lexical items, affixes or maximal projections merged in their specifiers or through the operation of Agree (Chomsky 2000, 2001):

(17) **Agree**
A head with uninterpretable features (Probe) searches in its c-command domain for an element with matching interpretable features (Goal) and is valued by it in case there is no intervening element with the relevant set of features.

3. Otherwise the derivation doesn’t converge.

For DP denotations, I propose that semantic properties such as number and (in)definiteness are denoted through the valuation of corresponding functional heads embedded in the nominal structures. Syntactically, above N, the following functional heads with relevant uninterpretable features are proposed:

(18) **Functional heads in DP**
- K([uKind], [uNoun]): where kind properties are interpreted.
- Num([uNumber], [uNoun]): where quantification is interpreted.
- D([uPerson], [uNoun]): where (in)definiteness is interpreted.

(19) **Functional items**
- Functional items have interpretable features such as [Kind], [Number] and [Person].

It can be seen that K head has an uninterpretable categorical feature [uNoun] which specifies the lexical item it merges with as a noun. A functional item such as classifier can be merged in Spec KP to check the [uKind] on the K head. A KP is possible to merge with a Num head and value its uninterpretable categorical feature [uNoun]. Then a number word merged in the Spec of Num values the [uNumber] on Num. Upon the valuing of Num head, NumP thus has the denotation of a subset of all the members or instantiations of a kind whether it consists of singular or multiple atoms.

Following Lyon (1999), I suppose that definiteness is the grammaticalization of identifiability and that definiteness should be unified with person as a same category. I assume further that indefiniteness is just the instantiation of the opposite value of definiteness and therefore should be treated under the same category. Consequently, D head is the locus of both definiteness and indefiniteness which contribute to DP’s denotation of individuals including kinds and objects. Formally, D head is assumed to have an uninterpretable Person feature which needs to be valued. Upon valuation, D may be specified for various person values and the DP denotes a definite referent, or it may not be specified for person but assumes a default 3rd person, denoting an indefinite reference. For non-referential NPs, D is not projected in the structure and the NPs are indefinites with a default 3rd person.

Turning to -men constructions, as I have already demonstrated, -men can be taken as a classifier incorporating number and person. It is therefore possible to assume that -men is a portmanteau element combining interpretable features of [Kind], [Number], and
[Person] that are able to check and value the matching uninterpretable features on functional heads. A CN+*men* phrase such as *jiazhang-men* ‘the parents’ will have the derivational structure in (20) (leaving off the valuation of categorical features for simplicity’s sake):

(20)

\[
\begin{array}{c}
\text{DP} \\
D[u\text{Person}] \\
\text{NumP} \\
\text{Num}[u\text{Number}] \\
\text{KP} \\
men[\text{Person}][\text{Number}][\text{Kind}] \\
K[u\text{Kind}] \\
jiazhang \\
p\text{parent}
\end{array}
\]

(*jiazhang-men* ‘the parents’)

In (20), *-men* is merged in Spec KP to check the [uKind] feature on K. It continues to value Num and D through Agree by establishing a connection with them based on their matching features. Num is valued and the DP is specified for plurality. D is valued and the DP is specified as definite for varied person values. At spell-out *-men* is suffixed to the noun.3

A question arises, however: how are functional heads interpreted in case no overt functional items are found in a nominal for purpose of valuing functional heads, for instance, in the case of Chinese bare nouns? In this respect, I propose that countable nouns in Chinese have a null classifier merged in Spec KP to check the [uKind] feature on K. It also has a [Number] feature and a [Person] feature which are able to value the corresponding uninterpretable features on Num or D. It can be seen that unlike the null classifier, the usual classifiers do not have interpretable [Number] features and [Person] features on them, and therefore can not appear without a preceding numeral or demonstrative.4 Specifically, I want to suggest that while the null classifier values [uNumber] apart from [uKind] (and sometimes [uPerson], too), it does not specify quantity, contrasting numerals which value [uNumber] and specify quantity as well. A principle of classifier usage is proposed as follows:

(21) Principle of null classifier

The null classifier is used only when quantity is not to be specified (by a numeral) within the nominal.

So, when quantity is to be specified, a usual classifier will be used which values [uKind]

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3 I suggest that the necessary suffixation of -men to nouns at spell-out is due to the lack of a preceding numeral.

4 As observed by Cheng & Sybesma (1999), CL+N combinations can be definite expressions in Cantonese. In that sense, classifiers in Cantonese do have interpretable [Number] and [Person] features.
and a numeral is merged to value [uNumber] and specify quantity. Otherwise, the null classifier is merged to value [uKind] and [uNumber] (and [uPerson]) without specifying quantity. Consequently, the relevant quantity has to be decided by the actual context.

Next, let’s look at pronoun/proper name+men. As was mentioned earlier, Chinese pronouns and proper names behave in a way more like CNs. In a feature-checking approach to nominal interpretation, it is actually very clear that whether a pronoun/proper name is interpreted as referential is a matter of interpretation based on syntax rather than on the position where it is base-generated. Therefore, I suggest that pronoun/proper name+men, when interpreted as having a homogeneous reading, will assume the same structure as in (20). However, while proper name+men has access to varied person values as usual CNs, pronoun+men seems to have specified person value due to the intrinsic person in the denotation of pronouns. Wo ‘I’ as an N denotes the property of “being identified with the speaker”, ni ‘you’ “being identified with the addressee”, and ta ‘he’ “being isolated from both the speaker and the addressee”. Therefore, wo-men ‘we’ has always a 1st person, ni-men ‘you pl.’ a 2nd person, and ta-men ‘they’ a 3rd person. For pronouns and proper names interpreted as referential, I propose a derivational structure in (22):

(22) 

\[ DP \]
\[ D[uPerson] \]
\[ wo/ni/tal/XiaoQiang[Person] \]

Without an intervening KP and NumP, referential pronouns/proper names do not have kind properties and do not undergo quantificational interpretation, either. Consequently, they assume uniqueness and are by default singular. The difference between pronouns and proper names is that while the former has intrinsic person value, the latter gets its person value from the context depending on whether it refers to the speaker, the addressee or a third party.

5. **Men associatives**

5.1. **Chinese -men vs. Japanese -tachi**

In many ways the Japanese associative -tachi is similar to the Chinese -men: -tachi is also restricted to human nouns, so its appearance after words like ahiru ‘duck’ in (23) is more likely to be found in children’s books with an implication of a group of

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Iljic (2005) has argued that only an associative, or “collective” in his term, reading is available for pronoun+men. Wo-men ‘we’, for example, “is not the addition of several Is expressing themselves simultaneously. It is the group in the name of which I speaks…” (p.93). However, in addition to a more commonly assumed associative meaning, wo-men can be also used in the usual plural sense. For example, in the case of “wo-men” used in the text of some documents signed by more than one person as Lü (1955) suggests. Likewise, Corbett (2005) points out that the English we, when referred to people speaking in chorus: we pray, we solemnly swear, etc, is also used in the usual plural sense. As to the 2nd person ni-men and 3rd person ta-men, the distinction between a plural reading and an associative one is more obvious, depending on whether in either case the addressee or the third party independent of the speaker and addressee is an individual related to his associates or multiple individuals as a whole.
ducks being personalized; it necessarily triggers plurality, as shown in (24); it is able to bring about associative meaning after a proper name, as illustrated in (25) (for a detailed description of the properties of *tachi, see Nakanishi & Tomioka 2004):

(23) ahi-ru-*tachi*-ga puuru-de oyoide-iru duck-TACHI-Nom pool-in swim-ASP ‘The ducks are swimming in the pool.’

(24) Otokonoko-*tachi*-ga ason-de-iru boy-TACHI-Nom play-Prog ‘(The) boys are playing.’

(Nakanishi & Tomioka 2004: 113)

(25) Taro-*tachi*-wa moo kaetta Taro-TACHI-Top already went home ‘The group of people represented by Taro went home already.’

(Nakanishi & Tomioka 2004: 124)

On the other hand, as Nakanishi & Tomioka (2004) point out, -tachi in fact does not always behave the same way as -men. First, while CN+*men* is necessarily definite, CN+*tachi* has no inherent definiteness. For example, as a definite expression CN+*men* can not be used in the existential constructions but CN+*tachi* can. The contrast is illustrated in (26a-b):

(26) a. *you ren-men have man-MEN ‘There are some people.’

(Chinese) (Iljic 1994: 94)

b. Kooe-ni kodomo-*tachi*-ga ita park-Loc child-TACHI-Nom existed ‘There were children in the park.’

(Japanese) (Nakanishi & Tomioka 2004: 120)

If CN+*tachi* can be either indefinite as in (26b) or definite as in (24), then there is a good reason to doubt that definiteness is an inherent property of it. Second, unlike CN+*men* whose extension is homogeneous or uniform in Nakanishi & Tomioka’s terms, CN+*tachi* does not have this uniformity requirement on its extension. For *xuesheng-men* ‘student-
men’, every part of its extension is predicted to be student. But for gakusei-tachi ‘student-tachi’, it is not necessarily interpreted as a group consisting of only students. Instead, in addition to some students, its extension can also include people that are not students but are closely related to them, for instance, their spouses. The generalization for the occurrence of -tachi, according to Nakanishi & Tomioka (2004), is that “CN+tachi is appropriate when the prominent part of a given plural entity has the property denoted by the CN and those who don’t have the property are closely associated with those who do” (p.125). The concepts of prominence and association involved here are argued to also be applicable to proper name+tachi in that the proper name picks out the most prominent person in a group and the rest of the group are closely associated with him/her. These distinctive properties of -tachi have led Nakanishi & Tomioka (2004) to propose it as a non-uniform pluralizer which introduces exceptions into its extension. Consequently, -tachi is argued to represent a new type of plurality different from the usual one based on a semi-lattice structure of plurals (Link 1983).

Treating -tachi as exceptional in effect claims that there is a new type of number adding to the existing typology. In the context of the analysis I have so far proposed for -men, an interesting question arises concerning -tachi: despite the superficial differences in behavior between CN+men and CN+tachi, is it possible to apply the analysis of -men to N+tachi in general? For this question, there are at least two reasons suggesting that the possibility is quite high: first, like -men, -tachi is more syntactic than lexical or morphological. It can also appear after a coordinated DP, denoting the DP referent and people associated with them, as illustrated in (27):

(27) Massaki-to Tomoko-tachi
Massaki-and Tomoko-TACHI
‘Massaki and Tomoko and people associated with them’

If tachi is more than morphological, it is expected to enter into syntactic derivations like -men. Second, what can be seen here is that CN+tachi shows the characteristics of associativity represented by associative plurals though in a slightly different way as far as non-uniformity is concerned. In that sense, NP+tachi in general behaves in parallel with the Chinese -men associatives, contrasting with CN+men. What seems to be the crux of the problem may not be how -tachi is different from -men, but rather how NP+tachi is different from CN+men structurally. In other words, it is possible that -tachi indeed is the Japanese counterpart of the Chinese -men, but Japanese nouns inclusive of pronouns, proper names, and common nouns are all available to the associative construction while in Chinese only pronouns and proper names do. Chinese common nouns, however, occur instead in the structure illustrated in (20). If this is on the right track, what is needed is a different structural representation for associatives from that in (20), eliminating the requirement for a new type of number.

5.2. The syntax of associativity

This sub-section exemplifies -men associatives to show how associativity is integrated in their syntax based on the preliminary study on CN+men and a structural parallel with the Japanese -tachi and Afrikaans hulle associatives.
Starting with the denotation of associatives, let’s look at NP+*hulle* first. For NP+*hulle*, its denotation is the referent of NP and other people associated with it. As den Besten (1996) points out, the reference of the pronoun *hulle* is dependent on that of the NP in NP+*hulle*. That is to say, *Pa-hulle* ‘dad-hulle’ does not mean “Dad and THEM” “because there is no independent reference for *hulle* ‘them’” (p. 16). Or in other words, the reference of the pronoun should include the reference of the NP and *Pa-hulle* ‘dad-hulle’ is better interpreted as ‘the group surrounding and including Dad’ (p. 16). Another piece of evidence den Besten gives that the reference of *hulle* includes that of the NP is the prediction that NP+*hulle* can refer to exactly two people, which is not possible if the reference of *hulle* is separated from that of the NP. As is illustrated in the second reading of (25a), *Pa-hulle* can include only Dad and another person but not necessarily Dad and other people exceeding two. That is the same case with Chinese *-men* associative in (28b):

(28) a.  
*Pa-hulle*  
father-them  
i. ‘Dad and his folks’  
ii. ‘Dad and another person, especially Mom: Mum and Dad, my/our parents’

(b.  
*XiaOQiang-men*  
*XiaOQiang-MEN*  
‘XiaOQiang and other people (one or more)’

This observation of *hulle*’s reference depending on that of the NP is also consistent with Nakanishi & Tomioka’s suggestion of picking out the most prominent person in a given plural entity and presupposing that the rest of the party is associated with him/her. The implication here is that for NP+*hulle*, the notion of associativity is two-fold: on the one hand, the reference of the pronoun is dependent on the reference of the NP; on the other hand, the referent of the NP is included in the referent of the pronoun.

Turning to *-men* associatives, a representational difference is obvious: while *-men* is a classifier incorporating number, *hulle* is a 3rd person plural pronoun. A question arises inevitably: if both *-men* and *hulle* triggers associative meaning and *hulle* supplies the denotation of individual properties, how do *-men* associatives obtain the same denotation now that *-men* is a classifier and does not denote properties as nouns do? Note that *-men* associatives of the form pronoun/proper name+*men* are often replaced by pronoun/proper name+*ta-men* (*ta* is literally ‘he’ and *ta-men* ‘they’). One possibility of accounting for how NP+*men* denotes the non-NP reference can be an element which is in parallel with the 3rd person pronoun *ta* ‘he’. In this regard, I assume that a *pro*, a minimally specified nominal category, is present in the NP+*men* associatives and supplies the property of human individuals. To be more precise, the Chinese *-men* associatives should be of the form pronoun/proper name+*pro+men* instead. And it is supposed that the Japanese associatives also have a null *pro* related to *-tachi*.

Based on the consideration of associativity discussed, a syntactic structure for associatives is proposed in (29), instantiating *-men* associatives:
It can be seen that in (29), DP₂, an independent DP with inherent values of (in)definiteness and/or person obtained under Agree as in (22), is positioned in Spec DP₁. As in (20), -men values Num and specifies DP₁ as plural. For the checking of [Person], instead of -men valuing it in the c-command domain of D, D head merges with DP₂ in its Spec and has its [uPerson] feature checked. Consequently, DP₁ is specified for the same person value as that of DP₂. For example, XiaoQiang-men can be specified for varied person values as XiaoQiang, a proper name which is accessible to 1ˢᵗ, 2ⁿᵈ, and 3ʳᵈ person, wo-men ‘we’ a 1ˢᵗ person as wo ‘I’, ni-men ‘you (pl.)’ a 2ⁿᵈ person as ni ‘you (sg.), and ta-men ‘they’ a 3ʳᵈ person as ta ‘he/she’. A pro is merged with K, supplying the property of human individuals in this case.

In case the proper name is specified for a 3ʳᵈ person, a 3ʳᵈ person pronoun ta ‘he’ is able to substitute for the pro in that ta’s denotation of “being a third party independent of the speaker and addressee” is compatible with the 3ʳᵈ person of DP₂, resulting in XiaoQiang-ta-men. In the case of 1ˢᵗ and 2ⁿᵈ person pronoun+pro+men, DP₁ is specified for a 1ˢᵗ or 2ⁿᵈ person by DP₂ which is nevertheless incompatible with the 3ʳᵈ person pronoun ta and therefore prevents ta from substituting for the pro. As to 3ʳᵈ person pronoun+pro+men, it is assumed that the replacement of pro with ta will cause a phonetic duplication with a 3ʳᵈ person pronoun in DP₂ and is therefore avoided. This explains why proper name+ta-men is available but pronoun+ta-men is not. The (im)possibility of ta replacement is summarized in (30a):

(30) a. XiaoQiang/*wo/*ni/*ta-ta-men
   XiaoQiang/I/you/he-he-MEN

b. XiaoQiang/*wo/*ni/*ta-wo-men
   XiaoQiang/I/you/he-I-MEN

 c. XiaoQiang/*wo/*ni/*ta-ni-men
   XiaoQiang/I/you/he-you-MEN

One the other hand, the replacement of the pro with the other pronouns wo ‘I’ and ni ‘you’ should be predicted to be possible in case the DP₂ has an agreeing person with that
of the pronouns’ such as wo-wo-men and ni-ni-men and XiaoQiang-men, where XiaoQiang is 1\textsuperscript{st} or 2\textsuperscript{nd} person. However, as ta-ta-men is prohibited because of phonetic reduplication, wo-wo-men and ni-ni-men are also prevented for the same reason. Consequently, wo ‘I’ or ni ‘you’ replacement of the pro is only possible with a proper name as DP\textsubscript{2}, as shown in (30b-c).

Returning to the Afrikanns NP+hulle structure, it can be said that the NP is the DP\textsubscript{2} in Spec DP\textsubscript{1} and hulle is the counterpart of the Chinese ta-men ‘he-MEN’ which has ta in the place of pro as in (29); only that hulle has become a grammaticalized single morpheme. And the present analysis is also compatible with the structure den Besten proposes for hulle constructions in (31) where the plural pronoun hulle is the head of DP\textsubscript{1} and DP\textsubscript{2} is in Spec DP\textsubscript{1}:

\begin{equation}
[DP\textsubscript{1} DP\textsubscript{2} Pron_{\text{plur.}}]
\end{equation}

In the case of CN+tachi, I assume that it has the same syntax as in (29) with DP\textsubscript{2} containing a common noun merged with K and -tachi being a classifier incorporating number as -men. When D head merges with DP\textsubscript{2}, DP\textsubscript{1} is specified for the same person or (in)definiteness of DP\textsubscript{2}. Unlike referential pronouns or proper names which are always definite, now that DP\textsubscript{2} is introduced by a common noun, it can be either definite or indefinite. This very fact predicts that DP\textsubscript{1} also has varied (in)definiteness effects. This just distinguishes CN+tachi from CN+men which is always definite. Another difference between them should be the (un)availability of associative reading. While CN+men only has a homogeneous reading, CN+tachi can have an associative or representative reading as discussed in the last sub-section. In that sense, CN+tachi appears to pattern with pronoun/proper name+men which is also associative. Then an immediate question is: how does the syntax in (29) predict associativity?

Looking at (32) and (33), it’s clear that -men and -tachi associatives do not have to be associative:

(32) the group consisting of XiaoZhang, XiaoWang and XiaoLi
\begin{itemize}
  \item a. XiaoZhang-(ta)-men
  \hspace{1cm} XiaoZhang-(he)-MEN
  \item b. XiaoZhang, XiaoWang-(ta)-men
  \hspace{1cm} XiaoZhang, XiaoWang-(he)-MEN
  \item c. XiaoZhang, XiaoWang, XiaoLi-(ta)-men
  \hspace{1cm} XiaoZhang, XiaoWang, XiaoLi-(he)-MEN
\end{itemize}

(33) Kyooju-tachi-wa yoku shabetta-kedo, gakusee-tachi-wa otonashi-katta
professor-TATI-Top a lot talked-but student-TATI-wa quiet-was
‘The professors (and their spouses) talked a lot, but the students (and their spouses) were quiet.’

(Natanishi & Tomioka 2004: 125)
To denote the group consisting of XiaoZhang, XiaoWang and XiaoLi, (32a-c) will all be sufficient. But unlike (32a-b), (32c) has no associativity in this context. Similarly, in (33), the professor-tachi or student-tachi can be associative but does not have to be. I have shown that in an associative structure, DP\textsubscript{2} as a presupposed independent reference checks \([u\text{Person}]\). What can be seen from (32) and (33) is that the referent of DP\textsubscript{2} may be a part of DP\textsubscript{1} referent or exactly the whole DP\textsubscript{1} referent. In the first case, when an inexhaustive subset of the DP\textsubscript{1} reference checks \([u\text{Person}]\) in D, associativity occurs naturally – the DP\textsubscript{1} referent necessarily consists the DP\textsubscript{2} referent and some other individuals. In that sense, associativity is not a result of a non-uniform plural – the extension of the DP\textsubscript{1} reference is uniform in that it is a group of human individuals. Instead, associativity is characteristic of Person licensing or (in)definiteness encoding as shown above, the semantic of which, though, is beyond this paper.

Finally, there is one more puzzle: within Chinese, if proper names and pronouns are allowed in DP\textsubscript{2}, why isn’t the definite NP in (34) a preferred candidate for an associative meaning?

(34) *na-ge  xuesheng-men
    that-CL student-MEN
    ‘the group represented by that student’

In fact, the unacceptability of (34) maybe does not result from any grammatical constraint. The possibility of (34) being grammatically justified can be verified by the possibility of \(ta\) replacement of the \(pro\) in (34), as shown in (35):

(35) Wo xiang qing na-ge  xuesheng-ta-men chifan.
    I want invite that-CL student-he-MEN eat
    ‘I’d like to treat the group represented by that student to dinner.’

If \(ta\) can replace the \(pro\) in (34), then it is very likely that the ungrammaticality of the construction is caused by other factors. One possibility could be that the availability of xuesheng-men as a constituent might cause ambiguity in suffixing -men to the definite expression na-ge xuesheng as a whole. In other words, (34) might easily obtain wrong segmentation as na-ge + xuesheng-men, and is therefore barred for the incompatibility of the classifier ge with -men in the same DP. This constraint, I would like to suggest, is one at PF rather than in the narrow syntax.

6. Conclusions and implications

In this paper the status of Chinese -men is investigated in relation to the category of associatives. It is concluded that: 1) -men is a classifier which selects human nouns and incorporates number; 2) pronoun/proper name+men involve associativity: structurally, -men is merged in Spec KP to check \([u\text{Kind}]\); under Agree, -men checks \([u\text{Number}]\) in Num and specifies it for plurality; an independent DP is merged in the specifier of the main DP to check \([u\text{Person}]\) in D and specifies person and (in)definiteness; 3) associativity comes about as a result of Person or (in)definiteness licensing by a subset of the DP reference.
The account that has been proposed for -men associatives also points to the possibility of treating associative cross-linguistically in a similar way, reducing the various forms of associativity to parametric differences. Specifically, the existence of a pronoun, either a third person singular pronoun, a null pro, or a grammaticalized plural pronoun in associatives should be predicted to be true of all the structures; and the positioning of the pronoun, proper name or even common noun in Spec DP should also hold universally. In other words, a referential expression in an associative sense is a universal phenomenon.

References