

## **On the Separation and Relatedness of Classifiers, Number, and Individuation in Niuean<sup>\*</sup>**

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This paper focuses on the role of number in Niuean, an Austronesian language in the Tongic subgroup of the Polynesian family. It is argued that the concepts of individuation, classification, and number are separable, even though they overlap significantly, as argued by Borer (2005). Number (i.e. singular/plural) must be expressed in the Niuean noun phrase, but it can be expressed on a variety of different elements in the phrase, such as on a quantifier, a numeral, or the reduplicated noun itself, or by means of a plural marker. The following question is addressed: Is it possible to situate number in a single functional head in Niuean? The answer is yes, but several problems must first be addressed. In order to explain the lack of the plural particle in quantified and counted nominal phrases, it is proposed that the linking particle that appears in such phrases be analyzed as a deficient classifier. This allows a uniform analysis for number: Niuean, like Armenian, has both a classifier and a number system. The paper then turns to examine certain classifying collective particles, which co-occur with the plural marker. These are considered to merge lower than number, but if number is otherwise unexpressed, they can raise to serve the function of number. The number marker itself is analyzed as being ambiguous between a number and a collective particle. In conclusion, neither the number system, nor the classifier system in Niuean is canonical, suggesting a system in change from classifiers to number.

Key words: numeral, classifier, collective particle, individuation, quantifier, Austronesian, Polynesian, Niuean

### **1. Introduction**

This paper examines the expression of singular and plural (i.e. number) in Niuean, an Austronesian language in the Polynesian family and Tongic subgroup. In this language,

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number is obligatory in the noun phrase, but it can be expressed on a variety of morphemes, including number markers, quantifiers, numerals, classifying collective particles, and by reduplication of the root noun itself. I develop an analysis for this system, in which Niuean has both a number marker and deficient classifiers, which are in complementary distribution. In addition, Niuean has classifying collective particles, which can freely co-occur with the number marker and the deficient classifiers. In order to account for exceptions, I propose that the number marker is ambiguous, acting sometimes as a number marker and sometimes as a collective particle. The analysis indicates a language in which both the number and the classifier system are non-canonical, and it further reveals that the concepts of individuation, classification, and number are separable even though they overlap significantly, as argued by Borer (2005).

In the rest of this introduction I shall provide some theoretical background. In §2 I shall present the relevant Niuean data. In §3 I shall outline an analysis for the basic data that is consistent with the theory. Section 4 extends the analysis to a variety of potential problematic data, and §5 concludes the paper.

Chierchia (1998a) compares classifier languages such as Chinese with non-classifier languages such as English. He proposes that in a classifier language, every noun extension is mass, and there is no plural marking. In order to be counted, the mass noun must combine with a classifier, as in (1).<sup>1</sup>

- (1) Mandarin:<sup>2</sup> (LE=aspect marker)  
 Tā mǎi-le [shí-zhī bǐ].  
 he buy-LE ten-CL pen  
 'He bought ten pens.' (Tang 2004:381)

In English on the other hand, nouns vary with respect to their count/mass properties. No classifier is needed with a numeral, and instead, a number system (singular/plural) is found.

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of the audiences at two conferences at Academia Sinica (*The Past Meets the Present: A Dialogue Between Historical Linguistics and Theoretical Linguistics*), and the University of British Columbia (*Parts and Quantities*). Special thanks to Julia Su for help with translation.

<sup>1</sup> Chierchia also discusses the lack of determiners in Chinese compared with English but I set this topic aside in this paper. (Cf. A. Li 1998, Borer 2005.) I assume Niuean has determiners, though the features of definiteness and familiarity in Niuean are distributed, like number, across several nodes, as discussed in Massam, Gorrie & Kellner (2006).

<sup>2</sup> Abbreviations used in this paper are: ABS=absolute; ACC=accusative; C=common; CL=classifier; DEM=demonstrative; DIV=indivduator (linker); EMPH=emphatic; GEN=genitive; ERG=ergative; LOC=locative; PERF=perfective; P; PERS=personal (human); PL=plural; PRED=predicate; PST=past; SG=singular; 1=first person; 3=third person.

- (2) He bought ten pens.

Based in part on Chierchia's work (1998a, 1998b), a popular generalization has emerged, as in (3). Others who have discussed this include Borer (2005), Doetjes (1996), Cheng & Sybesma (1999, 2005), Greenberg (1975), Sanches & Slobin (1973), Simpson (2005), T'sou (1976), and Fassi Fehri & Vinet (2007), as well as a great many others referred to in these works. For cross-linguistic and Oceanic typology, see Senft (2000), Aikhenvald (2000), and Bender & Beller (2006).

- (3) A language may be either a classifier language or a number language.

Recently, Borer (2005) has taken these ideas and observations and developed a structural analysis to account for (3). She argues that number and classifiers are in complementary distribution because they instantiate the same node, which she terms DIV since she considers that the role of number and classifiers is to individuate. Unlike Chierchia, she argues that all nouns in all languages are not lexically marked for mass or count (Sharvy 1978, Muromatsu 1998), but rather, that these notions are syntactically constructed. In order to be counted (or quantified in some languages for some quantifiers), a noun must first be rendered divisible into units. The head of DIV serves this purpose, but it must be assigned range (essentially, licensed in a specific way) by some overt morphology. In English, number serves this purpose; in Chinese, it is the classifier that assigns range to DIV.<sup>3</sup> In some other languages (e.g. Hungarian) Borer argues that numerals themselves are capable of performing a dividing function, thus in these languages, no plural markers appear if the noun phrase contains a cardinal or quantifier, even though the language otherwise has plural markers.

- (4) Hungarian:

a két fekete kalap(-ot)

the two black hat(-ACC)

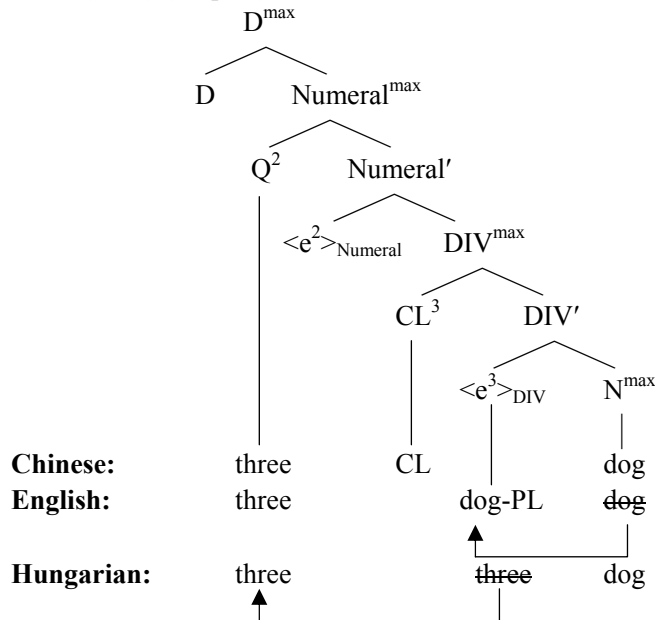
'the two black hats' (Borer 2005:117, p.c. from Kriszta Szendroi)

Borer's system is schematized as follows. (See also den Dikken 2003.)

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<sup>3</sup> For discussion of the Chinese plural marker *men*, see, for example, A. Li (1998, 1999), Tang (2005), and also Hsieh (2008), who provides an overview of the literature on this morpheme. Suh (2007) discusses the distribution of the plural marker with classifiers in Korean, arguing that classifiers and number are not in complementary distribution in this language, and see also Piriawiboon (in prep.) on Thai.

(5) Borer (2005) (adapted)



In English, the plural marker is merged into head of DIV.<sup>4</sup> Because it is affixal, the head noun raises to its left to derive the correct surface order (*dog+s*). In Chinese, on the other hand, the classifiers are merged into the specifier of DIV and the noun remains in situ. The numeral in both languages appears above  $DIV^{max}$  in the specifier of Numeral Phrase, which selects the DIV phrase. In Hungarian, numerals are first merged as dividers, then they raise to serve as cardinals.

Borer (2005) notes that the complementary distribution of classifiers and number does not hold exclusively at the level of cross-linguistic variation: it can hold within a single language. She notes that Armenian noun phrases with numerals can appear with either a plural marker, or a classifier, but not both.<sup>5</sup>

<sup>4</sup> There is a large literature on number also, that does not necessarily include discussion of classifiers. A few examples are Corbett (2000), Cowper (2005), Ritter (1992), and Wiltchko (2008).

<sup>5</sup> Borer (2005) notes that this was brought to her attention by Michelle Seigler (p.c.). In addition to the data in (6), Armenian also allows numerals with neither plural marking nor a classifier. Borer concludes that Armenian thus also allows cardinals to merge directly in DIV, similarly to Hungarian.

(6) Armenian:

- a. Yergu hovanoc-ner unim.  
two umbrella-PL have-1.SG  
'I have two umbrellas.'
- b. Yergu had hovanoc unim.  
two CL umbrella have-1.SG  
'I have two umbrellas.'
- c. \*Yergu had hovanoc-ner unim.  
two CL umbrella-PL have-1.SG  
('I have two umbrellas.') (Borer 2005:95, p.c. from Michele Siegler)

Thus, it is possible for a language to include both number markers and classifiers, but, given that in Borer's system they perform the same function, only one of them will ever appear within a single noun phrase. We shall see that Niuean bears similarities with Armenian in having both number and classifiers, and, in spite of the fact that the complementary distribution is not fully evident, I shall propose an analysis that allows us to maintain it up to a point. Niuean bears similarities with Hungarian as well, in allowing a single word to perform more than one function in a phrase, although in Niuean, it is not numerals, but collective particles that have this ability.

I shall adopt Borer's system in this paper, assuming, as she does, that all nouns must be individuated in order to serve as referential arguments. They become individuated when range is assigned to DIV, that is, when DIV is licensed and specified, by the merge of either number marking, or a classifier, or a cardinal with individuating capabilities. I shall argue that Niuean provides additional evidence for the idea that classifiers, in complementary distribution with number, can serve to individuate nouns, but I also argue that Niuean provides evidence that the classifying function and the individuating function of classifiers can be separated. In other words, classifying elements and pluralizing elements need not be in complementary distribution unless they both serve as individuator. This leaves the door open for the existence of non-individuating classifiers and number and to non-classifying or pluralizing individuator. This situation arises from a gap in Borer's system: Why do classifiers classify and why do number markers pluralize, in addition to their individuating functions?<sup>6</sup> I shall argue that in fact it is not necessary for 'classifiers' to actually classify nominals; that is, an item that individuates need not also classify or pluralize, but instead can embody pure individuation. On the other hand, I argue that some classifying and pluralizing morphemes do not also individuate. Thus the notions of number, classification, and

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<sup>6</sup> Thanks to Nattaya Piriawiboon for discussions on this question. See Piriawiboon (2008, in prep.) for an analysis of Thai classifiers, which bridge the number and determiner systems.

individuation are separable, though clearly intertwined. With this background discussion in mind, then, let us examine the Niuean nominal phrase. Our central starting question is: Is Niuean a classifier language or a number language?

2. Describing the Niuean number system

2.1 Word order in the Niuean noun phrase

Niuean is a predicate-initial language with predominantly isolating morphology and no agreement. It has an ergative-absolutive case marking system, which also encodes the proper or common status of the noun phrase. (7) shows the surface order of the elements found in a substantive noun phrase.

(7) The Niuean substantive nominal phrase (Surface order)

(PREPOSITION)	CASE	ARTICLE-Pr/Com	QUANTIFIER	NUMBER	COLLECTIVES	NOUN	ADJECTIVE	NUMERAL	DEMONSTRATIVE	POSSESSOR	RELATIVE CLAUSE / PP MODIFIERS
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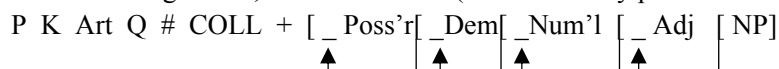
The table in (7) shows four domains within the noun phrase, each shaded differently. The first, the determiner domain, contains three morphemes related to determiners.<sup>7</sup> The first element here is the preposition, if there is one, followed by the case marker, which also encodes the proper or common status of the noun phrase. I show the proper-common article as a separate morpheme in (7), but in fact the case and proper-common features always appear in the same portmanteau morpheme. The determiner domain is followed by the number domain. In this domain we find various elements all of which can encode plurality: first a quantifier, if there is one in the noun phrase, then a plural marker, if the noun is plural. One of a set of collective particles can follow, then we find the domain of the noun itself.

<sup>7</sup> Determiner features and properties (e.g. definiteness, new information, argument-creating) are actually expressed across case and proper-common morphemes, and quantifiers in Niuean. This is discussed briefly in this paper, and see also Massam, Gorrie & Kellner (2006) and Ghomeshi & Massam (2009).

Following the noun is the final domain, the post-nominal domain, which will not be our focus in this paper. In this domain are adjectives, numerals, demonstratives, and possessors, with relative clauses and prepositional phrases at the end. Numerals and possessors can also occur pre-nominally, and when they do, they are in the quantifier slot.<sup>8</sup> In this paper I shall simply assume that the numerals and possessors are optionally merged in either the pre-nominal or post-nominal position: for a word order analysis based on movement see Kahnemuyipour & Massam (2006).

This paper examines only the pre-nominal elements, in particular those within the number domain. A background assumption is that the merge order is as shown in (8), with subsequent roll-up movement of the noun to its intermediate position, along the lines of Cinque (2005). This movement has the effect of reversing the order of all the elements involved in the movements, i.e. those to the right of the surface noun, as shown in (8), to derive the surface order in (7). I ignore relative clauses and PP modifiers in this paper. This assumption about the derivation of Niuean word order is not central to this paper, since the focus here is on the pre-nominal domain, in which no nominal movement takes place.

- (8) Assumed merge order, and movements: (See Kahnemuyipour & Massam 2006)



The concept of number (that is, of singular versus plural or dual) must be expressed in every Niuean noun phrase, but it can be expressed in various positions,<sup>9</sup> as outlined in §2.2.

## 2.2 Number on the noun

Niuean number can be expressed on the noun itself for a few nouns, which can be pluralized through reduplication (9a) or suppletion (9b). (Seiter 1980, Sperlich 2001, cf.

<sup>8</sup> In Niuean, it is clear that number and numerals are not in the same projection, as argued by Pearce (2007) also for various Oceanic languages.

<sup>9</sup> The same point that number can appear in several places in the noun phrase is made by Hsieh (2008) for Chinese. She demonstrates that number is expressed by numerals, classifiers, quantifiers, and by the reduplication of classifiers. Her approach is to posit that #P can appear in different specifiers in the structure, and can also undergo movement, as posited in this paper, and also in Borer (2005).

discussion of Paiwan in Tang 2004.)<sup>10</sup> This marking may suffice to satisfy the requirement that number be encoded in the nominal phrase, as in (9c).<sup>11</sup>

- (9) a. *mala/malamala* ‘bit/bits’  
 b. *tama/fānau* ‘child/children’  
 c. ti lalahi e fānau  
 then grew ABS.C children  
 ‘then the kids grew’ (LMR)

Interestingly, though, such plural nouns can appear alongside the plural marker. I shall return to this issue of double number marking below.

- (10) e tau fānau  
 ABS.C PL children  
 ‘the kids’ (LMR)

## 2.3 Number on number

As well as appearing on the noun, number can be encoded in a separate number marker. This marker is *tau*, already seen in (10), and shown also in (11) below. I assume that its counterpart is a null singular morpheme, since noun phrases unmarked for number are always interpreted as singular (12). This assumption, that there is a null singular morpheme, allows us to claim that number is always encoded in a Niuean noun phrase, even though the encoding may be null.

- (11) e **tau** tagata  
 ABS.C PL person  
 ‘the people’ (FN)

<sup>10</sup> Reduplication and suppletion are also used to ‘pluralize’ verbs in a rich system of pluractionality in Niuean (Haji-Abdolhosseini, Massam & Oda 2002, Seiter 1980, Sperlich 2001). Some of these pluractional verbs then require one of their arguments (either internal or external, depending on the verb) to be plural. See example (41) in this paper.

<sup>11</sup> Niuean data is taken from sources named after each example, and provided in the references. The abbreviations are: AMNB: Asekona, Manamana, Noue, and Beaumont (2005); DeS: De Souza (2001); NAH: Niue: A History of the Island; S: Seiter (1980); Sp: Sperlich (1997); THK: Cole and Kuatea (1996). Isolated words are taken from Sperlich (1997). LMR refers to the research project on Languages of Manakau Region, data from which was generously provided by Donna Starks. FN refers to field notes.



- (12) e            tagata  
       ABS.C    person  
       ‘the person’ (FN)

As Seiter (1980) notes, the plural marker *tau* can be used when there are two entities referred to, as in (13) (which he states is referring to the speaker’s biological parents). This is interesting, as there is also a dual marker in Niuean, which will be discussed below.

- (13) e            tau    mamatua    haaku  
       ABS.C    PL    parent        1.SG.GEN  
       ‘my parents’ (S)

## 2.4 Number on quantifiers

Number can also be expressed on a member of the Quantifier class in Niuean.<sup>12</sup> This group of words includes a variety of elements, listed in (14), which are grouped together as Quantifiers due to three shared properties.

- (14) Elements in the Quantifier position in Niuean<sup>13</sup>
- a. Quantifiers:     *loga* + *e* ‘many’    *gāhoa* + *e* ‘few’    *falu* + *a* ‘some’
  - b. Other elements: *possessors* + *a*    *numerals* + *e*
  - c. Singular:        *taha* (+*e*) ‘a/one’

All of these appear in the position labeled ‘Quantifier’ in (7), that is, they occur after the case marker and before all other nominal morphemes. As well, they share the property of appearing with a linking morpheme, appearing between the quantifier and the following word.<sup>14</sup> For some, the linker is *a* and for others it is *e*. For *taha* ‘a/one’ the

<sup>12</sup> The universal quantifier in Niuean, *oti*, never appears pre-nominally, but rather, in the post-nominal adjectival position in the noun phrase, as a floated element on the predicate or as a predicate itself.

<sup>13</sup> Quantifiers and numerals can also be used as predicates in Niuean, but this use is not relevant for this paper.

<sup>14</sup> An anonymous reviewer suggests that the particle *a* is ‘part of the possessive construction’ (cf. Sperlich 1997 who considers it to be a possessive/partitive particle), and that the particle *e* is absolutive case marker for common NPs. The analysis of *a* falls short because it does not explain the reason why the particle forms part of the possessive construction, i.e. what role it plays, and it also does not explain the use of *a* with just possessors and *falu*. The second analysis falls short because it does not explain why, if the complement of the quantifier is a

linker is optional (to the point where Seiter 1980 does not mention it at all), as is also the case to a lesser extent for *fa*lu (Sperlich 1997, and see below). Finally, they all share the property that when they occur, the absolutive case marker becomes optional, as in (15). Below, I shall argue that the linker is in fact an individuator, required for all Quantifiers (including numerals and quantifiers) so I gloss these linkers as DIV.

- (15) Mate tuai (e) ua e kulī.  
       die PERF ABS.C two DIV dog  
       ‘Two dogs died.’ (S)

Given the three shared characteristics, I consider these elements to form a class, even though the class contains a varied membership. I shall designate this class with a capital letter ‘Quantifier’ to distinguish it from the subclass of true quantifiers contained in this class. In (14) I have presented them in three groups. First are those that seem to be most purely quantificational. Second are possessor and numerals, which share with each other the property of being able to be either pre-nominal or post-nominal. Only when they are pre-nominal, does the linker appear. Finally, we find *taha* ‘a/one’, which alone among the quantifiers is singular. These members of the Quantifier class could be grouped differently, as they cross-classify. For example, both *taha* ‘a/one’ and *fa*lu ‘some’ are determiner-like in that they specify indefiniteness and focus.<sup>15</sup> Possessors share with *taha* and *fa*lu the property of expressing a value for definiteness, since possessed noun phrases are definite (Sperlich 1997, Massam & Sperlich 2000). Possessors also form a unique class by themselves, in not having any quantificational meaning, while *taha* is also unique in the group, in being singular. It is notable that those Quantifiers that arguably interact most with the determiner system in having a clear value for definiteness (*fa*lu, possessors) take the linker *a*, while those that are more purely quantificational (*loga*, *gāhoa*, numerals—including *taha* even in its indefinite use) take *e*.<sup>16</sup> All in all, it is an interesting group. Below I provide examples, and discussion.

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KP (i.e. a full Case Phrase), it cannot embed another quantifier (referring to the template in (7)). The reviewer also suggests that the pre-nominal numeral, as in (15) is acting as a verb, but this does not account for why it is preceded by a case marker. Instead, I analyze the entire phrase along the lines of the template in (7). It is possible that the (historical) partitive or case marker vocabulary item is being used here to individuate, but I consider that the features present in the syntax are not those associated with case, and that the uniformity of the particles across the Quantifier category suggests a uniform analysis as proposed in this paper. See also Note 20.

<sup>15</sup> There is also a pre-nominal non-specific marker *ha* which I do not include in the discussion in this paper. See Seiter (1980) for a brief description of this marker.

<sup>16</sup> Pearce (2007) discusses a similar overlap of number and determiner domains in other Oceanic languages.

- (16) a. mai he falu a aelani  
           from LOC.C some DIV island  
           ‘from some other islands’ (THK)  
       b. e falu a vala he vagahau Pukapuka  
           ABS.C some DIV piece GEN.C language Pukapuka  
           ‘some bits of the Pukapukan language’ (LMR)

*Falu* always appears with the linker *a*.<sup>17</sup> As well as indicating plurality, *falu* also indicates indefiniteness and focus (Massam, Gorrie & Kellner 2006). If *falu* does not appear, the noun phrase can be definite or indefinite.<sup>18</sup> *Falu* appears to be used to specify indefiniteness only in cases of new and salient information. It is also used contrastively, as indicated in the translation for (16a). We can thus analyze *falu* as a marker of focused plural indefinites.

The other quantifiers and the numerals are also plural, and are followed by the linker *e*, as illustrated below.

- (17) a. (e) loga e fua loku  
           ABS.C many DIV fruit papaya  
           ‘many papayas’ (S)  
       b. tokologa e Niue  
           PERS-many DIV Niue  
           ‘many Niueans’ (LMR)
- (18) a. (e) ua e kulī  
           ABS.C two DIV dog  
           ‘two dogs’ (S)  
       b. tokolima e tagata loloa  
           PERS-five DIV person tall  
           ‘five tall people’ (de S)

It is necessary at this point to introduce another piece of the Niuean number system, although I shall not discuss it here, but rather in §4 below. In cases where the quantifiers *loga*, *gāhua*, and the numerals quantify over a human noun, they are prefixed with the classifier *toko-*, as in (17b) and (18b). (cf. P. Li 2006, Chang, Tang & Ho 1998, Tang 2004.) (19) shows the possibility for the numeral with *toko-* to appear after the noun. As

<sup>17</sup> This is optional in spoken language, as there are some examples in transcribed interview data (LMR) of *falu* without *a*, and see Sperlich (1997).

<sup>18</sup> I do not indicate the definite/indefinite ambiguity in the translations in this paper.

noted above, when the numeral is post-nominal a linker does not appear, but the same is not true for *toko-*.

- (19) e        tau    tupua   tokolima  
          ABS.C PL    tupua   PERS-five  
          ‘the five tupua’ (=ancient legendary creature) (NAH)

Possessors, like numerals, can be pre-nominal or post-nominal. When they are pre-nominal, they appear with the linker *a*, and give definiteness to the noun.

- (20) a. e        ha        Sione    a        leo  
          ABS.C GEN.P Sione    DIV    voice  
          ‘Sione’s voice’ (FN)  
       b. e        leo        ha        Sione  
          ABS.C voice    GEN.P Sione  
          ‘Sione’s voice/a voice of Sione’ (FN)

Possessors do not seem to belong in the Quantifier group, as they alone do not indicate a value for number, as both singular and plural nouns can be possessed, as we see comparing (20) with (21). I shall return to examples like this, with both a Quantifier and a number marker, below in §4.

- (21) Pihia   nī        ke        he        haaku    a        tau    fānau.  
          same EMPH LOC.C GOAL.C 1.SG.GEN DIV PL    children  
          ‘It is just the same for my children.’ (LMR)

Although the membership of possessors in a group called Quantifiers is a bit mysterious, I include them because they share the three properties of the other elements in this group (position, linker, and optional absolutive case). The use of the linker *a* with possessors places them in a group with *falu*, and both specify for definiteness (as does *taha*, but it patterns as a numeral in both its uses in taking *e*). This suggests that the Quantifier group includes both quantifiers and determiner-like (definiteness-specifying) elements. I shall not discuss possessors in any detail in this paper, as they do not include any specification for number, the topic of this paper.

The final Quantifier to be discussed is *taha* ‘a/one’.

- (22) *taha mena*  
 one thing  
 ‘one thing’ (NAH)
- (23) *pepelu taha e lau uli*  
 fold one DIV leaf black  
 ‘fold one black strip’ (weaving instructions—THK)
- (24) *ne kitia ai he taha fonu e fifine nā*  
 PST see then ERG.C a turtle ABS.C woman DEM  
 ‘(one day) a turtle saw this woman’ (NAH)
- (25) *Ko e taha e vaka-toga Sepania Potikali.*  
 PRED C a DIV vessel Spanish Portuguese  
 ‘(It was) a Spanish Portuguese vessel.’ (NAH)

*Taha* is the singular counterpart of *falu*, indicating number, indefiniteness, and focus. *Taha* can be used as an article, or it can be used as the numeral ‘one’. It is unique among the Quantifier class in that the linker is fully optional. In fact, Seiter (1980) does not mention the use of a linker with *taha* but many examples are found in Niuean texts. It is not clear what governs the use (or non-use) of a linker, but the data in (22) to (25) show that it is not the meaning as ‘a’ or ‘one’ which determines the appearance of the linker, since the linker is optional with both meanings.

We have seen that number in Niuean can be expressed on the noun, the number marker (*tau* or null) or on a Quantifier element (e.g. quantifier, numeral). In addition, number can be expressed on a collective particle, but I shall leave discussion of this until later. The question to address now is: Can we identify number with a single head in Niuean? That is, within Borer’s (2005) system, can we place number in the DIV phrase and consider it to function as an individuator, along the lines of the English plural?

### 3. Analysis of the Niuean number system

#### 3.1 Linkers as classifiers

In order to place the data above into a system in which number is merged in DIV and serves to assign range to DIV and thus to allow for the individuation of nouns into units, we shall start with Seiter’s (1980) statement, based on his field work, that Niuean quantifiers are in complementary distribution with the number marker *tau*, and I set

aside the ability of *tau* to co-occur with a possessor and its linker (21).<sup>19</sup> I shall return to this last point below in §4.

If number marking with *tau*/NULL is in complementary distribution with Quantifiers, note that it is also in complementary distribution with the linkers. We can explain this fact, plus account for the occurrence of the linkers, by analyzing the linkers to be in fact classifiers.<sup>20</sup> We shall explore this idea in the following section, beginning by looking at the relation between Quantifiers and linkers.

### 3.2 Quantifiers and linkers

A linker *a* or *e* appears with Niuean pre-nominal numerals and quantifiers. Notably, it has long been observed that classifiers appear with numerals and, in some languages, quantifiers. Seiter states that the Niuean number marker does not co-occur with a quantifier + linker. Notably, it has been observed that number does not co-occur with classifiers. Niuean linkers merge between numerals or quantifiers and their nouns. Classifiers, in Borer's system, appear between numerals or quantifiers and their nouns.

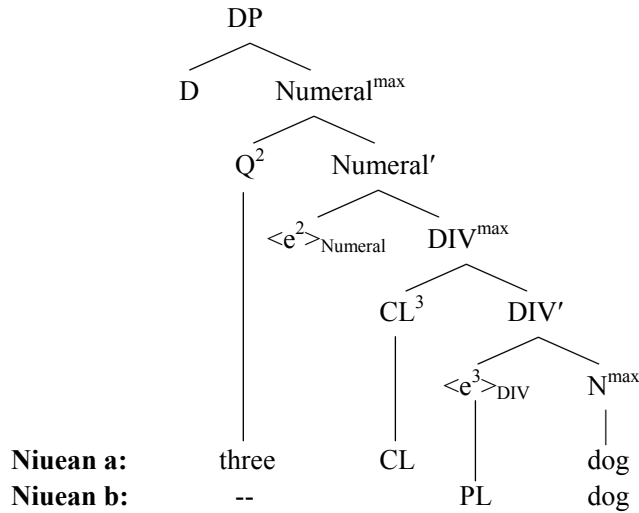
Given these correspondences, the possibility arises that Niuean linkers are in fact functioning like classifiers. With this, it becomes possible to develop a system for Niuean number that is consistent with the systems of other languages. Classifiers, or linkers, are merged in DIV, as shown below. Alternatively in Niuean, number can merge in DIV as also shown below.

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<sup>19</sup> I also set aside for now the ability for the plural marker to appear with inherently plural nouns (10). I return to this below in §4.

<sup>20</sup> The precise position and occurrence restrictions on Niuean linkers leads me to analyze them as classifiers, or more accurately, individuators, rather than predicational linkers in the sense of den Dikken (2006). They also do not act like case markers (Larson & Yamakido 2005) since linkers in Niuean as a whole do not reflect the proper-common absolutive agreement pattern of other case markers, though this is not visible after quantifiers, which do not take proper name complements. See also Note 14. Note that the analysis in this paper begs the question of how mass nouns ('water', 'air' etc.) are treated in Niuean, but this study has not yet been undertaken. Interestingly, it seems that a mass noun can appear with a plural marker (*e tau vai* 'ABS.C PL water') but the important point is to understand the precise meaning of these constructions (Wiltschko 2007, Barrie 2007).

(26) Niuean number (Borer 2005, adapted)



In Quantified contexts, a classifier is selected to assign range to DIV, whereas in non-Quantified contexts, the plural marker is used to individuate the nouns and allow them to be used as arguments. We can thus see that the Niuean system is similar to that of Chinese when there is a numeral, and English when there is not. We have accounted for the appearance of the so-called linkers as well as for the complementary distribution noted by Seiter between quantifiers and number.

However, there is one rather glaring difference between classifiers and our linkers, namely that our linkers do not classify. Classifiers are considered to have the following properties, as discussed by Aikhenvald (2000), Senft (2000), Rijkhoff (2002), A. Li (1999), as well as by other authors.

(27) Classifiers:

- reflect the class of the noun they appear with.
- appear obligatorily with numerals.
- are in complementary distribution with number.

While the Niuean linkers do not classify, they share the other two properties with classifiers. Borer considers that classifiers effect individuation and classification, but she does not really discuss the classification aspect of classifiers. In fact, her system predicts that we should find ‘classifiers’ that do not classify, in other words, pure individuator. If classifiers do indeed divide mass, that they do so while simultaneously agreeing with the noun would seem to be optional. The hypothesis here is that Niuean linkers are pure

individuators, appearing in noun phrases where there is a numeral or quantifier.<sup>21</sup> In a sense then, Niuean linkers or individuators support the ideas of Chierchia and Borer that there are elements dedicated to mass division. In Niuean individuators are unclouded by other agreement properties. I shall henceforth refer to *e* and *a* as individuators, and I gloss them as DIV.

## 4. Extending the analysis

There are four sets of data that speak to the hypothesis just formulated. The first consists of another group of classifier-like particles on which number can be realized, not yet discussed. The second consists of sentences in which number and individuators are not in complementary distribution. Third, are the cases of pluralization by reduplication or suppletion of the root noun, as in (9). Finally, is the classifier *toko-*, which appears as a prefix on numerals and quantifiers with human nouns, as in (17b) and (18b). I shall discuss each of these below. At the end of §4.2, I provide a summary of the morphemes discussed in this paper.

### 4.1 Classifying collective particles

It is difficult to know what to call this set of particles.<sup>22</sup> Seiter (1980) and Sperlich (1997) term them collective particles, as do several other linguists working on Oceanic languages, and I follow that usage here. They share properties with number, classifiers, and group nouns. Like number and quantifiers, they encode plurality (or duality in one case), like classifiers they agree with certain of the semantic features of the head noun, and like group nouns they appear with what are intuitively count nouns to form collections (e.g. ‘bunch of roses’ ‘group of children’). The examples discussed in the literature appear in (28).

- (28) Collective Particles (Seiter 1980, Sperlich 1997)  
*atu* ‘row, group’, *lafu* ‘family group’, *nā* ‘pair’, *kau* ‘organized group of people’

<sup>21</sup> Their role as individuators taking on some of the role of determiners, rather than as real classifiers, explains why they appear only when the numeral is pre-nominal, unlike *toko-* discussed in §4, and unlike the classifiers in some other languages (Rijkhoff 2002:77). The definiteness of noun phrases with pre-nominal possessors could be tied in here as well. The relation between classifiers and determiners is discussed by many authors.

<sup>22</sup> Macdonald (in prep.) undertakes a detailed study of similar particles and other instantiations of number in Tongan, Niuean’s sister language.



These are illustrated below. *Kau* indicates an organized group of people, while *atu* is used primarily for islands and mountains. *Nā* is a dual marker but it is not used with all sets of two items, as we saw in (13) above (Seiter 1980), rather it emphasizes a particular sense that the modified noun comes in pairs. *Lafu* is used for a family group.

- (29) e        kau        kaiha  
       ABS.C   group   thief  
       ‘a group of thieves’ (S)
- (30) he        atu        motu  
       LOC.C   row        island  
       ‘in the islands’ (NAH)
- (31) e        nā        una  
       ABS.C   pair        comb  
       ‘a pair of combs’ (NAH)
- (32) e        lafu                taokete<sup>23</sup>    haaku  
       ABS.C   family-group   brother    1.SG.GEN  
       ‘my big brothers’ (S)

The question arises as to the correct position of these elements in the nominal structure (26). First, note that collective particles are not in DIV, as they can co-occur freely with *tau* (33), (34), as well as with the individuating linkers, or classifiers (35).

- (33) mo    e    tau    atu    motu    foki    he        Pasifika  
       and   C   PL   row   island   also   LOC.C   Pacific  
       ‘and the islands of the Pacific’ (NAH)
- (34) tau    kau        koli  
       PL        group    dance  
       ‘cultural performances’ (NAH)
- (35) e        falu    a        atu    motu    Polinesia  
       ABS.C   some   DIV   row   island   Polynesia  
       ‘some Polynesian islands’ (NAH)

A question that arises is, are collective particles lexical heads, modifiers, or functional heads?<sup>24</sup>

<sup>23</sup> *Taokete* means elder brother of a man or elder sister of a woman (Sperlich 1997).

<sup>24</sup> An anonymous reviewer raises the question of whether the collective particles form compounds

If they were lexical heads, they would be parallel with English group nouns, such as *group* or *bunch*, which (at least prescriptively) serve as the head of the noun phrase, triggering agreement (36). More consistently, a property of such phrases is that they can be pluralized (37a), counted (37b-c), or (within limitations) modified independently of the head noun (37d).

(36) A group of kids is in the park.

- (37) a. groups of kids  
 b. five groups of kids  
 c. one bunch of roses  
 d. a large group of small kids

Importantly, if a group noun is pluralized or counted as in (37a-c), the meaning is that there is more than one group, or that there are exactly that number of groups. Number and numerals do not modify the complement of the group noun, but the group noun itself. To be specific, (37b) refers to five groups, not to five kids.

Niuean collective particles do not behave like group nouns in these respects. They do not appear with independent modifiers, number or numerals. Note additionally that the complement is bare, and does not appear with independent case, equivalent to *of* in English. These properties are illustrated in (38), where we can see that the human numeral *tokoua* ‘two’ ‘agrees’ with *tagata* ‘person’, and not *nā* ‘pair’ in being [+human], that is, in taking the affixal human classifier *toko-*. More convincingly, the numeral does not dualize *nā* ‘pair’, but rather *tagata* ‘person’. (38) does not refer to two pairs, but to two people. We can see, therefore, that the collective particle does not act as the head of the nominal phrase.

- (38) ke he tokoua e nā tagata Manu’a ko Ve’u mo Ve’a  
 LOC GOAL.C two DIV DUAL person Manu’a PRED Ve’u and Ve’a  
 ‘about two Manu’an men, Ve’u and Ve’a’ (NAH)

Note, however, that at least some of the collective particles can act as nouns, but when they do so they do not take NP complements, but act like regular nouns in their properties.

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with the following nouns, especially given the fact that they occur often with the same nouns. This may well be the case in some instances. If so, these compounds would form a class with nouns lexically pluralized by reduplication or suppletion, which are discussed in §4.3.

- (39) a. e        tau kau    he        vaka-toga Sepania  
           ABS.C PL    group GEN.C vessel    Spanish  
           ‘the crew of the Spanish ship’ (NAH)  
       b. he        tau lafu  
           GEN.C PL    family  
           ‘of families’ (LMR)

If collective particles are not group nouns, acting as heads of noun phrases, they might be modifiers, in an adjunct position, along the lines of the examples in (40).

- (40) a. roses in bunches  
       b. grouped children

This would allow for numerals to count the people and not the pairs in (38), as it would mean something like ‘two men in a pair’, or ‘two grouped men’ rather than ‘two pairs of men’. However, such a position would predict that nouns with collective particles and without numerals or other pluralizers, such as those in (29) to (32), are technically singular, given the generalization that a noun not marked for number is singular.<sup>25</sup> While this seems to be true of collective particles in at least one related language, it is not the case in Niuean. Noun phrases containing collective particles act as plural noun phrases for grammatical processes such as pluractional number agreement. The reduplicated verb *momohe* ‘sleep’ in (41) has the property of requiring a plural subject (Seiter 1980, Sperlich 1997, Haji-Abdolhosseini, Massam & Oda 2002). It is clear that the noun phrase containing the collective particle *kau* is acting as plural for the purposes of this requirement, thus it is acting more as a functional head than as a modifier.<sup>26</sup>

- (41) Ne momohe fakalataha e        kau kilikiki he        fale akoako.  
       PST sleep(PL) together    ABS.C team cricket    LOC.C house pastor  
       ‘The cricket team slept together in the pastor’s house.’ (Sp)

Let us explore the idea, then, that collective particles are functional heads, serving to provide the noun phrase with the feature plural, but not serving as the lexical head of

<sup>25</sup> In POLLEX (Biggs 1993), a cognate *kau-* in the Central Outlier language Takuu is defined as making ‘a group into a singular noun’. This does not seem to be the case in Niuean, as we see in (41).

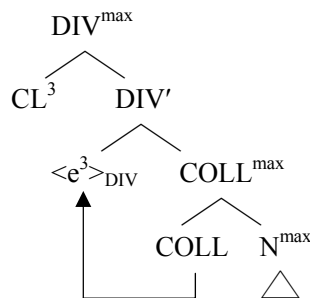
<sup>26</sup> Of course, the pluractional agreement in (41) is semantic, rather than structural agreement, as discussed in the sources cited. Nonetheless, since the agreement requirement normally requires an overt marker of plurality on the argument, such as *tau*, this example indicates that the collective particle does indeed pluralize the noun phrase.

the phrase. One option is to consider them classifiers. After all, they share with traditional classifiers the ability to actually classify, unlike the so-called pure individuation ‘classifiers’ *e* and *a* put forward in this paper.

As well as classifying the noun they occur with, collective particles also provide number and the semantics of being grouped. So while they are (in part) classifiers, we can consider that they do not merge in DIV, but form a separate grammatical head. This has two interesting consequences. First, note that classificatory functions are separable from the individuation functions (unlike in the cases studied by Borer 2005). We have seen individuator that do not classify (*e*, *a*), and now classifiers that do not individuate (collective particles). Second, more locally to Niuean, note that the DIV position remains empty in collective particle noun phrases, and is thus available for the plural marker or for an individuator to merge there. This explains why collective particles can occur with these items, as in (33), (34), (35), and (38).

But while collective particles can co-occur with the plural marker or with individutors, they can also be found as the only marker of number in the noun phrase, as in (29), (30), (31), and (32). In this case, I propose that they are like Hungarian numerals in being able to optionally assign range to DIV, as well as serving as collective particles. To perform both functions, they are merged in a phrase I shall simply term ‘COLL’, for collective, but they can then move to DIV and assign range to DIV, in case there is no plural marker or individuator to do so.<sup>27</sup> This movement is similar to that proposed by Borer (2005) for Hungarian, and see also Simpson (2005).

(42) Niuean collective particles, serving also as individutors



To summarize, classifiers in Niuean consist of two groups. First are *e* and *a*, which are classifiers that individuate but do not classify, then we find *atu*, *kau*, etc., which do classify and can individuate, but primarily act as collective particles. In Chinese, the

<sup>27</sup> I do not explore here the theoretical question as to whether this movement is ‘last resort’ or simply an option.

two functions of classification and individuation are always combined, but in Niuean, these features and functions are distributed differently.

Let us now turn to a discussion of remaining problems for the analysis.

## 4.2 ‘Illicit’ combinations

Recall that according to Seiter (1980), quantifiers do not co-occur with the number marker *tau*. I have built the analysis on this observation, but in fact, ‘illicit’ combinations are found fairly frequently in naturally occurring (as compared with elicited) Niuean data, both written and spoken. For example, the following combinations of quantifiers and plural markers were found in a recently published volume of Niuean stories about how the coconut tree came to exist on the island, in a spoken interview, and in a book about the history of Niue.<sup>28</sup> The third example, with possessors, is a little different as in this case the Quantifier (that is, the possessor) does not include any specification for number, unlike the true quantifiers in (43a) and (43b) which are plural.

- (43) a. he      falu    a      tau fuata   Niue  
           ERG.C   some   DIV   PL   youth   Niue  
           ‘some Niuean youths’ (AMNB)
- b. ke      he      loga   e      tau mena  
           GOAL.C   LOC.C   many   DIV   PL   thing  
           ‘about many things’ (LMR)
- c. ha      lautolu    a      tau malolo  
           GEN.P   3.PL.GEN   DIV   PL   strong  
           ‘their strengths’ (NAH)

More research must be done into the tension between the claim that these combinations are impossible and their evident occasional occurrence in Niuean writing and speech. One possible solution is to consider that, like the collective particles, *tau* can serve two functions, that of an individuating pluralizer (that is, a true number marker) and that of a collective particle. In Niuean and across several Polynesian languages *tau* is also used as a reciprocal marker, prefixed onto the verb, and as a verbal prefix it also serves as a marker of repeated or continual action. Reduplication, which I argue below to be a collective, likewise occurs across the verbal and nominal domains. There is a suggestion in these facts that *tau* bears a nominal aspectual flavour (as argued for Tongan by Macdonald, (in preparation)) rather than being a true number marker. That

<sup>28</sup> They are unlikely to be performance errors, occurring as they do in edited texts.

Austronesian plural markers are not fully grammatical is not a new observation. P. Li (1973) analyzes Tanan Rukai number as having little or no syntactic consequence, aside from the semantic content (as discussed by Zeitoun 2009). There are also resemblances between *tau* and *men* in Chinese, which has also variously been called a plural marker and a collective marker. An overview of the literature on *men* is in Hsieh (2008).

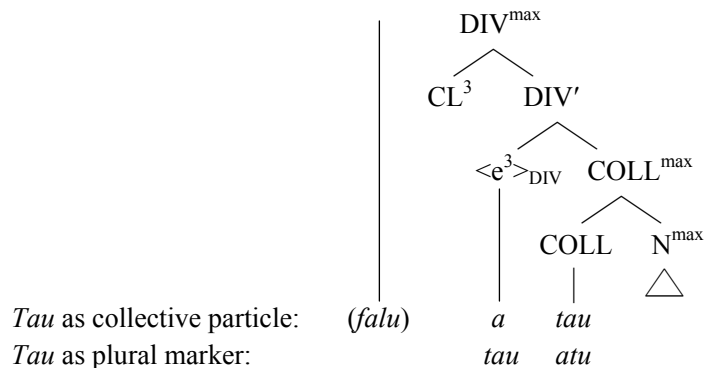
Note that there is another lexical use of *tau* in Niuean and across Polynesian languages with various meanings associated with amount. It can mean ‘count’, ‘cost’, and ‘year’. If this is related to the plural marker, it indicates that *tau* was historically lexical. In addition *tau* is considered to be a noun/adjective and not a plural marker by some grammarians of Niuean.

(44) (McEwen 1970:314)

*Tau*: denotes nominal plural, preposed to a singular noun to form a plural noun phrase with minimally two nouns (NP = N N), or *tau* can be construed as a plural noun followed by the singular noun in the form of an adjective (NP = N ADJ).

If *tau* is ambiguous between a plural marker and a collective particle, it can be merged directly into DIV, or it can merge into COLL. Collective particles can move to serve as plural markers if no other plural is present, otherwise they remain in situ and provide collectivity without individuation, co-occurring with another individuator such as *tau* or *e/a*. *Tau*, as an emerging number marker, unlike other collective particles, can alternatively merge directly into DIV, co-occurring with another collective particle. Note that in case of genitive Quantifiers, since DIV is filled with the individuator *a*, *tau* is used as a collective particle to provide the semantics of pluralization as necessary, as in (21) and (43c).

(45) *Tau* as collective particle, and as plural marker



In (46) I provide a summary of morphemes which can assign range to DIV.

- (46) a. ***tau*<sub>1</sub>** - Plural marker: merged in DIV, assigns range to DIV. Can co-occur with collective particles, or can occur alone, but cannot co-occur with quantifiers and individuator *e* and *a*.
- b. **NULL** - Singular marker: merged in DIV, assigns range to DIV. Cannot co-occur with plural quantifiers or with collective particles, due to number mismatch. With *taha*, can be replaced by *e*, optionally, as a range assigner (*taha e* versus *taha*).
- c. ***atu* etc.** - Collective particles: merged in COLL, can optionally raise to DIV and thus assign it range. Can co-occur with the plural marker and with individuator *e* and *a*, or can occur alone, after raising to DIV.
- d. ***tau*<sub>2</sub>** - Collective particle: merged in COLL, can co-occur with individuator *e* and *a*, or can occur alone.<sup>29</sup>
- e. ***e*, *a*** - Individuators: selected by Quantifiers to appear in DIV and assign it range. Cannot occur with plural, but can co-occur with collective particles (including *tau*<sub>2</sub>).

### 4.3 Pluralization by reduplication and suppletion

In (9) above we saw that it is possible for plural to be expressed by means of reduplication or suppletion on the noun. Another example appears in (47).

- (47) *alo/aloalo* ‘inside surface/inside surfaces’

The question arises as to whether this pluralization acts like number in assigning range to DIV. Alternatively, it could be analyzed as patterning with collective particles, optionally assigning range to DIV in case there is no plural marker or individuator to do so. In fact (10) above, in which a suppletive plural noun appears with *tau*, indicates that reduplication is not a number marker, merged (even in abstract terms) in DIV. If it were, it would not be able to co-occur with *tau*, since *tau*, to the left of the reduplication, is either a collective particle or a number marker, hence it will assign range to DIV in (10). It is quite possible, on the other hand, for reduplication to be classified as a collective particle (which then can optionally assign range to DIV if nothing else does), and which

<sup>29</sup> Our system predicts two possible derivations for *e tau tagata* ‘people’, one where *tau* is merged in DIV as plural, and one where it is merged in COLL as a collective particle, and raises to DIV. Whether both derivations should be allowed to co-exist is a question I put aside in this paper.

can appear with *tau* as a plural marker, as in (10). I thus consider reduplication and suppletion pluralization to classify with collective plurals, and not with true pluralization.

This result sits well with the meanings associated with reduplicated and suppletive plurals, namely that they do not just mean ‘more than one’ but rather, that they denote customary groupings such as a bunches of kids, collections of bits and pieces, etc. In addition, collective particles tend to appear over and over again with the same or similar nouns, and reduplication also is non-productive on nouns, appearing only on a few nouns (Sperlich 1997, 2001, and see Note 24). Classifying reduplicated and suppletive plurals as COLL phrases correctly predicts that they can occur alone, or with plural markers and quantifiers. Of course the COLL morpheme is abstract here, triggering the reduplication or suppletion of the head noun at the level of vocabulary insertion.

#### 4.4 *Toko*- the ‘real’ classifier in Niuean

As noted above, as well as having non-classifying individuators such as *e* and *a*, and as well as having collective particles with a classifying function, Niuean also has a canonical classifier of the type discussed by Senft (2000), Aikhenvald (2000), and also Tang, Chang & Ho (1998), and Tang (2004). This fits the traditional features of a subset of classifiers, in appearing only in numeral or quantifier expressions, realized as a prefix on the numeral or quantifier, rather than as a particle occurring between a numeral and a noun. As noted in §2, in (17b) and (18b) repeated here as (48) and (49), this classifier occurs on numerals or quantifiers that quantify over human nouns.<sup>30</sup>

- (48) tokologa    e    Niue  
       PERS-many   DIV   Niue  
       ‘many Niueans’ (LMR)

- (49) tokolima   e    tagata   loloa  
       PERS-five   DIV   person   tall  
       ‘five tall people’ (de S)

The question arises as to whether these classifiers assign range to DIV. In fact, it appears that they do not, and that further, they are not members of the group of left edge functional categories in the noun phrase (case, determiner, number). This is evident in

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<sup>30</sup> Sperlich (1997:320) notes that in some cases ‘the prefixed item can acquire an additional meaning ... such as *tokoua* “two people” or “husband, wife”.’ He also notes that words so prefixed can be used as verbs, such as *tokofiha* ‘to be very few people’. In all cases, such words refer to human beings.



that they occur on the numeral regardless of whether it is pre-nominal or in a post-nominal adjectival position (as in (50), a repetition of (19)). This is not the case for the linking individuator, which only appear after pre-nominal numerals.

- (50) e        tau    tupua   tokolima  
       ABS.C PL    tupua   PERS-five  
       ‘the five tupua’ (=ancient legendary creature) (NAH)

I shall not provide an analysis of this type of classifier here, but its existence does lend support to the claim in this paper that the function of classifier exists independently of the function of individuation, in spite of the fact that in many languages the two functions are collapsed together on a single group of grammatical morphemes, commonly termed classifiers, as in Chinese. Similarly, it provides support for the position that at least this type of classifier is merged in the same category as numerals (though not all classifiers are—e.g. the individuator in DIV) (cf. Pearce 2007).

## 5. Conclusion

Looking at the Niuean number system, we see pieces of a classifier and a number system. It seems that from the left of the noun phrase, in the presence of a quantifier or numeral, an impoverished classifier system is apparent, in the sense that quantifiers and numerals ‘reach into’ DIV, and affect the assignment of range to DIV, by selection of an individuator (a sort of deficient classifier) in the head of DIV, such that DIV is assigned range by an element with no plural semantics, but which also does not classify. From the right, we see another more semantically-based partial classifier system, in the sense that collective particles can ‘reach into’ DIV and affect the assignment of range to DIV, by movement from COLL to DIV, such that DIV is assigned range by an element which is classified depending on noun-type and also provide plurality. At the same time, when not influenced by elements on the left by selection, or on the right by movement, DIV is assigned range by a number marker, either singular (NULL) or plural (*tau*).

I started out with the assumption, from Borer (2005), that nominal phrases contain a head that individuates nouns. Niuean (like Armenian and Hungarian) show us that there need not be only one way, even in a given language, for individuation to take place, since Niuean contains both classification and number systems. It is interesting to note, however, that both of these systems are somewhat deficient. Number is in some sense more semantic than grammatical in Niuean, as seen by the lack of any grammatical agreement, the existence of lexically plural nouns, the use of collective nouns, the ambiguity of *tau*, and the pluractional system. (See also P. Li 1973 and Zeitoun 2009.) In addition,

the classifier system proposed herein is deficient also, similarly to the weak classifier systems discussed by Tang (2004). Tang notes that in Paiwan, human nouns behave like Chinese nouns, whereas non-human nouns behave like English nouns. In Niuean, quantified nouns behave (in part) like Chinese nouns, in not being marked for plurality but instead selecting number-neutral individuators. In Chinese these individuators also classify, whereas in Niuean they do not. On the other hand, in Niuean, non-quantified nouns behave (sometimes) like English in having a plural marker. At other times, though, a collective particle is used instead. Collective particles also have some classificatory properties. In addition, we find the classifier *toko-* appearing as a prefix on numerals and quantifiers with human nouns. These properties suggest a system in flux, moving towards a grammatical number system, and away from a semantic number/classifier system, but the question whether there is historical validity to this will have to remain for another day.

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## 論紐威語之分類詞、數 與個別化之分離性及相關性

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本文為探究紐威語 (Niuean) (南島語系-玻里尼西亞語族-東加語分支) 之數的研究。在紐威語中，數的概念必須體現於名詞組中；其能以數量標記 (number markers)、量詞 (quantifiers)、數詞 (numerals)、分類集合助詞 (classifying collective particles)，或是經由複製名詞詞根來表示。

本文主張紐威語具有數量標記以及不完全分類詞 (deficient classifiers)，且這兩者在句法位置上呈現互補分布。此外，分類集合助詞能自由地與數量標記或不完全分類詞一同出現於名詞範域；針對此現象，文中建議紐威語之數量標記具有兩種不同的句法功能，除了表示數量，數量標記有時也當集合助詞 (collective particles)。

根據 Borer (2005) 的研究，個別化的概念 (the concept of individuation)、分類 (classification)，以及數 (number) 常常在句法上以同一形式出現。本文的分析指出紐威語有非傳統上所熟悉的數以及分類詞系統，且上述的表徵，即個別化的概念、分類，以及數在此語言是可分開的，並能以不同的句法形式來表示。

關鍵詞：數詞，分類詞，集合助詞，個別化，量詞，南島語系，玻里尼西亞語，紐威語