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**Counting and Measuring in Arabic: Plurality and  
*Senf***

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## 1. Introduction

This thesis examines the *senf* plural of Palestinian colloquial Arabic. Arabic has an interesting paradigm of nouns singular, dual, and plural. There are two kinds of singularity: feminine singular and masculine singular. Usually, feminine singular ends with the suffix *-a*, as in (1a) or the suffix *-i* as in (1b):

- (1) a. *tuffa:h-a*  
apple-F.SG  
'apple'  
b. *mʕalim-i*  
teacher-F.SG  
'(female) teacher'

Unlike the feminine singular, the masculine singular has no specific ending:

- (2) a. *walad*  
boy.M.SG  
'(male) boy'  
b. *moʕalim*  
teacher.M.SG  
'(male) teacher'

In the case of professions, by adding the *-i* suffix to the masculine singular form, we get the feminine form:

- (3) a. *tʕa:lib*  
student.M.SG  
'(male) student'  
b. *tʕa:lb-i*  
student-F.SG  
'(female) student'

Plurality in Arabic is of two kinds: sound plural and broken plural. The sound plural consist of adding the suffix *-a:t* to the feminine singular nouns, as in (4a), and the suffix *i:n* is added to the masculine singular nouns as in (4b):

- (4) a. *mʕalm-a:t*  
teacher-F.PL  
'(female) teachers'  
b. *mʕalm-i:n*  
techer-M.PL  
'(male) teachers'

The second type of plurality is broken plural. It is based on modifying templates rather than affixation, thus adding the *-i:n* suffix to *kita:b* is infelicitous as in (5b), the only way to indicate plurality is using the broken plural form (5c) :

- (5) a. *kita:b*  
book.M.SG  
'book'  
b. # *kita:b-in*  
book-M.PL  
'books'  
c. *kotob*  
book.BROKEN PL  
'books'

In addition to the singular and plural forms of the nouns, there is another type which is called *senf* plural, as in (6c) it is formed by dropping the suffix of the feminine singular form:

- |  |  |   |
|--|--|---|
| (6) a. <i>tuffaḥa</i><br>apple.F.SG<br>'apple' | b. <i>tuffaḥ-a:t</i><br>apple.F.PL<br>'apples' | c. <i>tuffa:ḥ</i><br>apple.SENF<br>'apples' |
|--|--|---|

In traditional grammars, *senf* is considered as a kind of plural noun, however there are differences between *senf* and other plural nouns, as we will see. I will argue that *senf* nouns are object mass nouns in the sense of Barner and Snedeker (2005), also called 'naturally atomic mass nouns' in Rothstein (2010). So far, there are no semantic analysis of *senf* nouns. Ouwayda (2014) suggests that they are a special kind of mass nouns which she calls 'batch' nouns, but she does not offer a semantic analysis nor a precise description of what nouns can have a *senf* form.

This thesis is going to explore the morphology, the syntax and the semantics, of the *senf* form compared with other plural and mass forms. I will argue that *senf* nouns like *tuffa:ḥ* are object mass nouns. However, there has not yet been any systematic analysis of the count/mass distinction in Arabic, so in order to do this, I will first have to develop tests to distinguish mass from count nouns in Arabic.

Although the phenomenon that I am discussing is common across all Arabic dialects, in this thesis I will focus on colloquial Palestinian Arabic, specifically the Galilee spoken dialects.

## **2. Theoretical Background**

### **2.1. The mass/count distinction**

In various languages there is a count/mass distinction. Typically, count nouns denote objects while mass nouns denote substances. This was claimed, among many linguists, by Link (1983) and by Chierchia (2010) who approach the domain of denotation in two ways. Link (1983) suggested that there are two domains in which count nouns and mass nouns are denoted: the atomic domain and the non-atomic domain. Chierchia (2010), on the other hand, argued that there is only one domain of denotation in which count nouns are associated with stable atoms and mass nouns are associated with non-stable atoms.

Rothstein (2010) claims that this distinction is grammatical and it can be seen in the morphosyntax of noun phrases. Count nouns in English (i) occur with the cardinal

numerical '*three trees*' (ii) take plural morphology '*three trees*', and (iii) do not occur with classifiers '*three pieces of chair*'. On the other hand mass nouns (i) cannot occur with the cardinal numerical '# *three milk*', (ii) cannot be pluralized '# *milks*' and (iii) obligatorily occur with classifiers '*three pieces of cheese*'. According to Rothstein (2010, to appear), the grammatical distinction between count nouns and mass nouns lies in the operations of counting and measuring: "counting is putting atomic entities in one-to-one relation with natural numbers ... measuring is giving value to a quantity on a calibrated dimensional scale" (2010, p. 5.). Rothstein stresses the fact that while (i) distinguishes between mass and count nouns in all languages, other contrasting properties differ from language to language. So far, there has been no systematic study of the ways to distinguish mass and count nouns in Arabic.

## 2.2. Object mass nouns

The existence of nouns like *furniture*, *footware* and *fruit* show that there are mass nouns which at the same time denote sets of entities which come in naturally individuable units. These are called in the literature object mass nouns (Chierchia 1998, Barner and Snedeker 2005, Rothstein 2010). They pose a problem for the traditional mass/count theories: syntactically they behave like mass nouns, for example, they do not pluralize *#furnitures* and do not combine with a numerical *#three furniture*, while semantically that they denote sets of individuable objects.

Bale & Barner (2009) suggested that object mass nouns have individuated structures and the same semantic properties as count nouns even though they have syntactic properties of mass nouns. Barner and Snedeker (2005) conducted experiments on the semantics of count nouns, mass nouns and object mass nouns. They found that the comparisons of object mass nouns rely on comparing numbers of individuals. When we compare object mass nouns, we compare numbers of objects, due to the fact that these nouns quantify over individuals.

Pires de Oliveira and Rothstein (2011) argue that in Brazilian Portuguese, all nouns are flexible. In that sense, they all have an object mass noun counterpart. In example (7c) we can see that the bare singular *criança* 'child' in Brazilian Portuguese has the properties of a mass noun denoting a kind, but it refers to individuals.

- (7) a. (uma) criança      b. (algumas) crianças      c. criança  
       (a) child                (some) child.PL            child  
       'child'                    'children'                    'child'.

The next section will review plurality and the mass/count distinction in Arabic.

### 2.3 Plurality in Arabic

Count nouns in Arabic have two forms, singular and plural. The singular form is divided into two basic types: masculine singular as in (8a) and feminine singular as in (8b). (Feminine singular nouns are generally marked with the suffix *-a* or *-i*.)

- (8)            a. *falla:ḥ*  
                   farmer.M.SG  
                   'farmer'  
                   b. *falla:ḥ-a*  
                   farmer.F.SG  
                   'farmer'

There are two patterns of plurality for singular nouns: 'sound plural' and 'broken plural'. Sound plurals are formed by attaching the *-i:n* suffix to masculine nouns and the *-a:t* suffix to the feminine nouns (9).

- (9)            a. *falla:ḥ-i:n*  
                   farmer-M.PL  
                   'male farmers'  
                   b. *falla:ḥ-a:t*  
                   farmer. F.PL  
                   'female farmers'

The masculine plural, *-i:n*, can only be used when the singular noun denotes a male human being (10b). On the contrary, feminine plural, *-a:t*, can be attached to either masculine or feminine nouns as in (10c/11b).

- (10) a. *qara:r*  
           decision.M.SG  
           'decision'  
           b. # *qara:r-i:n*  
           decision.M-M.PL  
           'decisions'  
           c. *qara:r-a:t*  
           decision.M-F.PL  
           'decisions'
- (11) a. *fadzara*  
           tree.F.SG  
           'tree'  
           b. *fadzar-a:t*  
           tree.F-F.PL  
           'trees'

Broken plural is based on templatic formation, and not affixation, it changes the internal structure of the stem. The main stem of the singular form is not preserved, as with sound plurals, and no specific suffixes are added, as in (12).

- (12)          a. *kita:b*  
                   Book.M.SG  
                   'book'  
                   b. *kotob*  
                   book.M.PL  
                   'books'

McCarthy & Prince (1990) points out that in Arabic there are twenty different types of broken plural forms based on how the internal structure of the stem changes. For example, *kotob* in (12b) is the *fuʕul* pattern. Some patterns are more frequent than the others.

### 3. *Senf* Plural

It seems that object-mass nouns are also found in Arabic. They show the syntactic properties of mass nouns since they cannot occur with a numeral unless preceded by a classifier, but they denote individuated furniture objects.

- |  |   |  |
|--|---|--|
| (13) a. <i>aθa:θ</i><br>furniture<br>'furniture' | b. # <i>θalaθ aθa:θ</i><br>three furniture<br># 'three furniture' | c. <i>θalaθ ʔotaʕ aθa:θ</i><br>three piece.PL furniture<br>'three pieces of furniture' |
|--|---|--|

Some count nouns in Arabic appear to have a form which behaves as an object mass noun as well as singular and (sound) plural forms. These paradigms are illustrated in (14) and (15). The forms in (14/15c) are called *senf*: they refer to individuals, yet they cannot be pluralized, and they cannot be modified by numerals. They are formed by taking morphologically feminine singular nouns and dropping the feminine marking *-a* or *-i*, as in (14c) and (15c).

- |  |   |   |
|--|---|---|
| (14) a. <i>tuffa:ħa</i><br>apple.F.SG<br>'apple' | b. <i>tuffa:ħa:t</i><br>apple. F.PL<br>'apples' | c. <i>tuffa:ħ</i><br>apple.SENF<br>'apples' |
| (15) <i>baʔara</i><br>cow.F.SG<br>'cow '         | b. <i>baʔara:t</i><br>cow. F.PL<br>'cows '      | c. <i>baʔar</i><br>cow.SENF<br>'cows '      |

In this thesis I am going to claim that *senf* nouns behave like object mass nouns in English. A list of *senf* nouns can be found in the Appendix. In addition to singular and plural, some count nouns have another form called *senf*. *Senf* nouns are morphologically a type of broken plural. Syntactically they have the properties of mass nouns: they cannot be modified by a cardinal numerical (19a) and cannot be counted without a classifier (16b); semantically, they denote atomic objects that can in principle be counted. (17) Shows that *tuffa:ħa:t* and *tuffa:ħ* both denote a plurality of apples and thus dictate the use of plural pronoun *-hin* 'them' (17a/b), while it is

infelicitous for *tuffa:ħa* to appear with a plural pronoun (17c), we can only use the singular pronoun *-ha* (20d).

- (16) a. # *θalaθ tuffa:ħ*  
 three apple.SENF  
 ‘three apples’
- b. *θalaθ \*(haba:t) tuffa:ħ*  
 three unit apple.SENF  
 ‘three apples’
- (17) a. *faret θalaθ tuffa:ħa:t iw ħatet-hin fi-l ki :s*  
 I bought three apple.F.PL and I put-them in the bag  
 ‘I bought three apples and I put them in the bag.’
- b. *faret kθi:r tuffa:ħ iw ħatet-hin fi-l ki :s*  
 I bought many apple.SENF and I put-them in the bag  
 ‘I bought three apples and I put them in the bag.’
- c. # *faret tuffa:ħa iw ħatet-hin fi-l ki :s*  
 I bought apple.F.SG and I put-them in the bag  
 #‘I bought an apples and I put them in the bag.’
- d. *faret tuffa:ħaa iw ħatet-ha fi-l ki :s*  
 I bought apple.F.SG and I put-it in the bag  
 ‘I bought an apples and I put it in the bag.’

In general, *senf* nouns are natural kinds, such as animals, fruits and vegetables. I found two exceptions to this generalization: two nouns that have *senf* forms but are not natural kinds: *ri:f* ‘feather; and *šaħer* ‘hair’:

- (18) a. *ri:fa*  
 feather.F.SG
- b. *ri:f*  
 feather.SENF
- (19) a. *faħra*  
 hair.F.SG
- b. *faħer*  
 hair.SENF

Borrowed words for natural kinds do not have *senf* plural. This is the reason why *bandora* ‘tomato’ does not have a *senf* form. It was borrowed from the Italian *pomodoro* to Arabic. Another example is the word *zarafa* ‘giraffe’. Although it ends with *-a*, and it has a feminine plural *zaraf-a:t* ‘giraffes’, it does not have a *senf* form.

Although derived from feminine nouns, *senf* nouns are masculine with respect to the agreement:

- (20) a. *tuffa:ħ*      *k θi:r*      /#      *k θi:ri*  
 apple.SENF    many.M.                              many.F



‘many apples’

In terms of gender agreement, *senf* nouns are different from other types of plural forms. For instance, in broken plural the gender of the singular and the plural forms is the same (21a), but in *senf* nouns the singular form takes feminine adjectives and the plural form takes masculine adjectives (21b).

- (21) a. *kita:b*            *kbi:r*            /    *kutub*            *kba:r*  
          book.M.SG    big.M.SG            book.M.PL    big.M.PL
- b. *tuffa:haa*        *kbi:ri*            /    *tuffa:h*            *kbi:r*  
          apple.F.SG    big.F.SG            apple.SENF    big.M.SG

We can now raise the question of what exactly *senf* plural is. On the one hand, *senf* nouns pair with broken plurals: they denote pluralities, and do not take affixes. On the other hand, they take singular agreement and cannot be modified by a numerical. There are several researches on the syntactic, semantic, and morphological features of Arabic DPs, but there has been little discussion on the mass/count distinction and the nature of *senf*. These researches assume a mass/ count distinction in Arabic, but do not provide tests for it. Borer and Ouwayda (2010) and Ouwayda (2014) address discuss what they call 'batch' nouns in Lebanese Arabic. They argue that they behave like mass nouns, but do not discuss explicitly the semantic properties that make them mass, as they focus more on the syntax of Arabic DPs. *Senf* nouns seem to be a specific kind of batch noun. Ouwayda (2014) suggested that "batch" nouns are mass nouns, since they occur bare with adjectives such as *kbi:r* 'a lot', and *kbi:r* 'big', but does not give an explanation of what "batch nouns" are, or when they can occur. This kind of noun has two plural forms: broken plural, and feminine plural.

This thesis will examine the properties of *senf* nouns, and see if they really behave like mass nouns, by exploring them morphologically, syntactically, and semantically. It will also compare the distribution of *senf* nouns in Palestinian Arabic and 'batch' nouns in Lebanese Arabic as discussed by Ouwayda.

#### 4. Research questions

The aim of this thesis then is to investigate the nature of the *senf* plural in Palestinian colloquial Arabic. As we have seen, *senf* is a puzzle since it has the morphology of plural nouns but does not occur with numerical. I shall argue in this thesis that *senf* are object mass nouns, but in order to do this I will first need to establish tests for distinguishing between mass and count nouns in Palestinian colloquial Arabic. *Senf* nouns may turn out to be a subclass of Ouwayda's (2014) 'batch' nouns, but in order to argue this, it is necessary to explain what 'batch' means and provide tests that reveal their semantic features.

This thesis will thus address the following questions:

- (i) The singular/plural/*senf* distinction: What is the distribution of plurality in Arabic? What are the special properties of each one?
- (ii) The mass/count distinction: Which test can be used to show the mass/count in Arabic? What can the different plural forms tell us about the mass/count distinction?
- (iii) *senf* nouns: What are the morphological and lexical properties of *senf* nouns? How does the presence of *senf* nouns influence other grammatical features, such as gender agreement? What is the evidence that *senf* forms are mass nouns? What is the semantics of the *senf* form? What can *senf* forms tell us about the mass/count distinction in Arabic?
- (iv) How do *senf* nouns in Palestinian Arabic compare with Ouwayda's 'batch' nouns?

#### 5. Preliminary Results

##### 5.1 Mass and Count in Arabic

###### 5.1.1 The count mass distinction in Arabic

Arabic is a language which shows the mass/count distinction: nouns like *binit* 'girl' while nouns like *ħali:b* 'milk' do not #*θala:θ ħali:b* '# three milk'. Rothstein (to

appear) shows that the mass/count distinction is expressed differently in different languages. Preliminary results from Hnout (2014) show a number of distinctions between mass nouns and count nouns in Arabic.

The following section presents two of these tests: classifiers and determiners. Others will be discussed in the thesis.

### 5.1.1 Classifier Distinction

In Arabic, mass nouns can only be counted via classifiers, shown in (22a), but count nouns cannot take classifiers, shown in (22b).

- (22) a. *fribit kuba:yet ħali:b.*  
 drink.M.PAST.1<sup>ST</sup> P one.cup. milk.SG  
 'I drank one cup milk'.
- b. #*θalaθ weħda:t bana:t fato al-saf.*  
 three.F CLASS girl.PL enter.past.F.PL DET-class.  
 'Three units of girls entered the class'.

Classifiers cannot occur with count nouns, because count nouns are atomic predicates and can be directly modified by a cardinal numerical.

### 5.1.2 Determiners Distinction

There are two kinds of determiners in Arabic. Unrestricted determiners, such as *kull* 'all', can occur both with count nouns (23a) and with mass nouns (23b). However, in the case of count nouns, the noun is pluralized, while in the case of mass nouns, the noun is singular.

- (23) a. *kull il- bana:t hilwa:t*  
 DET DET- girl.PL beautiful.F.PL  
 'All the girls are beautiful.'
- b. *kull il-ħali:b ba:red.*  
 DET DET- milk.SG cold.SG  
 'All the milk is cold.'

*fw:yit* 'little of' is another determiner in Arabic which is constrained by the mass/count distinction. It can be used with mass nouns such as *ħali:b* 'milk' as in (24a), however it cannot occur with count nouns as in (24b).

- (24) a. *fw:yit ħali:b*

DET- few milk  
 'a little of milk'.  
 b.# *fw:yit bana:t*  
 DET- few girl.PL  
 'few girls'

## 5.2 Preliminary results on *senf*

Despite the fact that *senf* nouns have been considered plural in traditional grammars, if we compare *senf* forms with both feminine plural forms and mass nouns, we see that *senf* behaves consistently like a mass noun and not like a plural. This section will show that *tofa:h* syntactically is mass, like milk.

In order to show how the mass/count distinction works I am going to investigate pairs of triples such as *tuffa:ħa* (singular), *tuffa:ħa:t* (feminine plural), and *tuffa:ħ* (*senf*).

- (25) a. *fi: tuffa:ħa ĩala: al-tawela.*  
 There apple.F.SG PREP DET-table  
 'There is an apple on the table'.
- b. *fi: θalaθ tuffa:ħa:t ĩala: al-tawela.*  
 There are three.F appl.F.PL PREP DET-table  
 'There are three apples on the table'.
- c. *#fi: θalaθ tuffa:ħ ala al- tawela.*  
 There are three.F appl.SENF PREP DET table.SG  
 'There are three apples on the table'.

Feminine plural noun phrases, like *tuffa:ħa:t* in (25b), denote pluralities of individual entities, and can be modified directly by a cardinal numerical. In contrast, (25c) is infelicitous because, *senf* nouns in Arabic are not considered as atomic predicates denoting objects that can be counted. As the evidence from Palestinian colloquial Arabic indicates, *senf* nouns cannot be modified by cardinal numerical. I claim that *senf* in Arabic can be regarded as denoting a kind which behaves as one entity.

The existence of these data indicates that it is possible that *toffa:ħ* behaves in a certain way like a mass noun. The following tests show the mass-like distribution of *senf* in Arabic.

### 5.2.1 Classifiers Distinction:

If *tuffa:h* is a mass noun, we expect that it can occur with classifiers. This is indeed what we find: in (26a) we find a kind classifier, *anwa:ʕ* 'kinds', that denotes a set of subkinds, in (27a) we find a unit classifier *ħaba:t* 'units'. (26b) and (27b) prove that *tuffa:h* is different than the feminine plural *tuffaħa:t*, which cannot occur with classifiers, while *tuffa:h* obligatorily appears with a classifier. *anwa:ʕ* and *ħaba:t* are classifiers in Arabic that can precede *senf*, but cannot occur with feminine plural nouns. This shows that *tuffa:h* is behaving like a mass noun, in contrast to *tuffa:ħa:t*.

- (26) a. *θala:θ*      *\*(anwa:ʕ)*      *min*      *al-tuffaħ*  
 three. M      kind.CLASS.PL      PREP      DET-apple.SENF  
 'three kinds of apples'  
 b. # *θala:θ*      *anwa:ʕ*      *min*      *al-tuffaħa:t*  
 three.M      kind.CLASS.PL      PREP      DET-apple.F.PL  
 Intended meaning: 'three kinds of apples'

- (27) a. *θala:θ*      *ħaba:t*      *tuffa:h*  
 three. F      unit.CLASS      apples.SENF  
 'three (units of) apples'  
 b. # *θala:θ*      *ħaba:t*      *tuffa:ħa:t*  
 three. F      unit.CLASS      apples. F.PL  
 'three units of apples'

### 5.2.2 Determiners distinction:

Determiners are sensitive to the *senf*- and feminine plural distinction. Some determiners are unrestricted, in other words, they can occur with both *senf* and feminine plurals as in (28a) and (28b), and others cannot as in (29a) and (29b).

- (28) a. *kull*      *al-tuffa:ħa:t*      *t<sup>ʕ</sup>aib-a:t*  
 DET      DET-apples. F.PL      delicious.F.PL  
 'All the apples are delicious'.  
 b. *kull*      *al-tuffa:h*      *t<sup>ʕ</sup>aib.*  
 DET      DET apples.SENF      delicious.M.SG  
 'All the apples are delicious'.

*kull*, ('all') in English is a determiner that can occur with both *senf* and feminine plural nouns. On the contrary, *f<sup>w</sup>:yit* ('few') is a restricted determiner that can only occur with *senf* nouns.

- (29) a. *fw:yit tuffa:h*  
 DET- few apple.SENF  
 'few apples'
- b. # *fw:yit tuffa:ha:t*  
 DET- few apple.F.PL  
 'few apples'

## 6. The Semantic Meaning of *senf*

The above tests indicate that *senf* forms can be treated as mass nouns. It is not a ‘stuff’-denoting mass noun because it is derived from the singular feminine count noun which denotes individuable objects. We saw that in some contexts, the *senf* form has the same properties as the feminine plural. In (20) we showed that both *senf* and the feminine plural go with plural pronouns. This raises the question ‘what sort of mass nouns are *senf*?’

Following Bale and Barner (2009), Bale and Snedeker (2005) and Rothstein (2010), I argue that *senf* nouns have the same properties as object mass nouns: they have the syntax of mass nouns (they do not pluralize, do not combine with numerals, and obligatorily occur with classifiers), while semantically they quantify over individuals and denote plurality.

In this thesis I will argue that *senf* nouns in Arabic are equivalent to object mass nouns. In addition to a plurality of individuals reading, *senf* nouns can also have the kind reading as in (30b) *tuffa:h* denotes different kinds of apples. The following examples show the semantic differences between *senf* nouns and feminine plural nouns.

- (30) a. *mi:n maʕa: tuffa:hat akθar*  
 Who has apple.F.PL more  
 'who has more apples?'
- b. *mi:n maʕa: tuffa:h akθar*  
 Who has apple.F.PL more  
 'who has more (kinds of) apples?'

The question in (30a) asks about the number of apples. In other words, the possible answer should be only in terms of cardinality. On the other hand, (30b) can have the

kind reading, therefore, the possible answer can also be in terms of cardinality or according to the number of the different apple kinds.

Another example illustrating the semantics of the *senf* form is provided in example (31).

- (31) a. *ʃaʒara:t*    *al-ḥaqil*  
Tree. F.PL    DET-field  
'The trees of the field'  
b. *ʃaʒar*        *al-ḥaqil*  
Tree. *senf*    DET-field  
'The (different kinds of) trees of the field'

Semantically, there is a difference between the two examples: the feminine plural *ʃaʒara:t* in (31a) denotes a plurality of trees, while *ʃaʒar* in (31b) can both denote a plurality of trees or different kinds of trees that are in the field – apple trees, orange trees, peach trees, etc.

The semantics of *senf* nouns in Arabic are interesting since they can quantify over individuals – a property of a count noun; and they can denote a kind property of a mass noun. The tests that were presented earlier indicate that syntactically *senf* nouns are mass, since it cannot be directly modified by cardinal numerical unless it is preceded by a classifier. In addition, *senf* nouns behave like mass nouns with respect to determiners. These patterns are interesting and need to be investigated in detail.

## 7. Conclusions

There has been a lot of discussion recently (e.g. Pelletier 2012) as to how the mass/count distinction plays out in different languages (whether they are count, mass, or flexible), since different languages distinguish between mass and count nouns in different ways and classify different nouns as mass and count. So far there has been little research with respect to tests that distinguish between these two types of nouns in Arabic, and specifically Palestinian Arabic. This thesis will clarify how to identify mass and count and object mass nouns in Arabic. I will argue that *senf* should be treated as object mass nouns in the sense of Barner & Snedeker (2005). Showing that *senf* is a mass noun is going to contribute to our understanding of crosslinguistic variation in the expression of the mass count distinction, and will also shed more light on our understanding of the structure of the count/mass distinction in Arabic

## 8. Outline of the thesis

Chapter 1: Introduction

Chapter2: The count/ mass distinction in Arabic.

Chapter3: Morphological and Lexical Properties of *senf*.

Chapter4: *senf* as an Object Mass Noun.

Chapter 5: The Semantics of *senf* Forms

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## Appendix



Table 1, singular and senf examples

<b>singular</b>	<b>Feminine plural</b>	<b>senf</b>	<b>English</b>
<i>faʃra</i>	<i>faʃra:t</i>	<i>faʃr</i>	hair
<i>ʃadzara</i>	<i>ʃadzara:t</i>	<i>ʃadzar</i>	tree
<i>baqara</i>	<i>baqara:t</i>	<i>baqar</i>	cow
<i>naħli</i>	<i>naħla:t</i>	<i>naħil</i>	bee
<i>naxli</i>	<i>naxl:t</i>	<i>naxil</i>	Type of trees
<i>namli</i>	<i>namla:t</i>	<i>namil</i>	ant
<i>tuffa:ħa</i>	<i>tuffa:ħa:t</i>	<i>tuffa:ħ</i>	apple
<i>borta:ni</i>	<i>borta:na:t</i>	<i>borta:n</i>	orange
<i>mau:zi</i>	<i>mau:za:t</i>	<i>mau:z</i>	banana
<i>lau:zi</i>	<i>lau:za:t</i>	<i>lau:z</i>	nuts
<i>jauzi</i>	<i>jauza:t</i>	<i>jauz</i>	nuts
<i>ja:ji</i>	<i>ja:ja:t</i>	<i>Ja:j</i>	hen
<i>zakra</i>	<i>zakra:t</i>	<i>zahr</i>	flower
<i>zatu:ni</i>	<i>zatu:na:t</i>	<i>zaitu:n</i>	olives
<i>hama:mi</i>	<i>hama:ma:t</i>	<i>hama:m</i>	dove
<i>bađinjani</i>	<i>bađinjana:t</i>	<i>bađinjan</i>	eggplant
<i>rumma:ni</i>	<i>rumma:na:t</i>	<i>rumma:n</i>	pomegranate
<i>ʃinbi</i>	<i>ʃinba:t</i>	<i>ʃinb</i>	grapes
<i>ti:ni</i>	<i>ti:na:t</i>	<i>ti:n</i>	fig
<i>xu:xa</i>	<i>xu:xa:t</i>	<i>xu:x</i>	peaches
<i>mifmifı</i>	<i>mifmifa:t</i>	<i>mifmif</i>	apricot
<i>dura:qa</i>	<i>dura:qa:t</i>	<i>dura:q</i>	peach
<i>karazi</i>	<i>karaza:t</i>	<i>karaz</i>	cherries
<i>s<sup>ʃ</sup>abra</i>	<i>s<sup>ʃ</sup>abra:t</i>	<i>s<sup>ʃ</sup>aber</i>	patience
<i>mauzi</i>	<i>mauza:t</i>	<i>mauz</i>	banana
<i>ija:s<sup>ʃ</sup>a</i>	<i>ija:s<sup>ʃ</sup>a:t</i>	<i>Ija:s<sup>ʃ</sup>a</i>	pear
<i>ʃama:mi</i>	<i>ʃama:ma:t</i>	<i>ʃama:m</i>	melon
<i>batei:xa</i>	<i>batei:xa:t</i>	<i>batei:x</i>	watermelon
<i>anana:si</i>	<i>anana:sa:t</i>	<i>anana:s</i>	pineapple

<i>tu:ti</i>	<i>tu:ta:t</i>	<i>tu:t</i>	Strawberry
<i>bas<sup>ʕ</sup>ali</i>	<i>bas<sup>ʕ</sup>ala:t</i>	<i>bas<sup>ʕ</sup>al</i>	onion
<i>fijli</i>	<i>fijla:t</i>	<i>fijil</i>	radishes
<i>bat<sup>ʕ</sup>ta</i>	<i>bat<sup>ʕ</sup>ta:t</i>	<i>bat<sup>ʕ</sup></i>	duck
<i>wazi</i>	<i>waza:t</i>	<i>waz</i>	goose
<i>zara:ffi</i>	<i>zara:ffa:t</i>	<i>zara:ff</i>	Giraffe
<i>ri:fi</i>	<i>ri:fa:t</i>	<i>ri:f</i>	feather
<i>fara:fi</i>	<i>fara:fa:t</i>	<i>Fara:f</i>	Butterfly
<i>naʕa:mi</i>	<i>naʕa:m:t</i>	<i>naʕa:mi</i>	Ostrich
<i>wardi</i>	<i>warda:t</i>	<i>ward</i>	flower