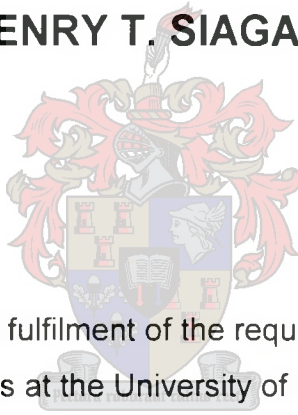# MASS NOUNS IN TSHIVENḒA

BY

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Thesis presented in partial fulfilment of the requirements for the degree
of Master of Arts at the University of Stellenbosch

Study leader: Prof. J.A. du Plessis

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DECLARATION

I, the undersigned, hereby declare that the work contained in this thesis is my own original work and that I have not previously in its entirety or in part submitted it at any university for a degree.

Signature   Date

ABSTRACT

This study investigates the mass nouns in Tshivenḓa. The specific mass nouns in each nominal class will then be investigated to see whether they have certain morphological and syntactic features which are different from count nouns.

Chapter one is the introduction of this study. It describes the aim, organisation and method of the study.

Chapter two is the overview of the literature on mass nouns. It gives overview of the most prominent words on mass nouns in general. Some of the prominent works on this alternation include the following: Pelletier (1979a, 1979b,); Ware (1979), Cartwright (1979), McCawley (1979) Chierchia (1982), Link (1983) and Eschenbach (1993).

Chapter three investigates which nouns may be mass nouns, the purpose of the classification of nouns in wordnet, nominal classes in Tshivenḓa and the morphological and syntactic features of mass and count nouns.

Chapter four is the conclusion of the study, the summary as well as investigation into the morphological, syntactic and semantic feature of plurality.

OPSOMMING

Hierdie studie ondersoek die meervoudige naamwoorde in Tshivenḓa. Die spesifieke meervoudige naamwoorde sal elkeen in sy normale klas geondersoek word om te sien of hulle sekere morfologiese en sintaktiese eienskappe het, wat nie ooreen stem met tel naamwoorde.

Hoofstuk 1 is die inleiding van hierdie studie. Dit beskryf die doelwit, organisasie en metode van die studie.

Hoofstuk 2 is 'n oorsig van die literatuur aangaande meervoudige naamwoorde. Hierdie is 'n oorsig van die mees prominente meervoudige naamwoorde in die algemeen. Sommige van die prominente werke van hierdie nasie sluit die volgende in: Pelletier 91979a; 1979b), Ware (1979), Cartwright (1979), McCawley (1979), Chierchia (1982), Link (1983) en Eschenbach (1993).

Hoofstuk 3 identifiseer meervoudige naamwoorde. Die doel van die klasifikasie van naamwoorde in woordnet, normale klassie in Tshivenḓa en die morfologiese en sintaktiese eienskappe van meervoudigheid.

Hoofstuk 4 is die konklusie van die studie, die opsomming as ook die ondersoek in die morfologiese, sinktaktiese en semantieke eienskappe van meervoudigheid.

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CHAPTER 1

INTRODUCTION

1.1 AIM

According to pustejovsky (1996:17) the most studied distinction for normal semantics is probably that of count versus mass. This is a distinction which dates back to Aristotle. This nominal alternation has not received any serious attention for the various African languages in South Africa. It is for example evident that count nouns may be concrete or abstract a distinction which hold for mass nouns. The problem which needs to be addressed in this study is to establish in what way these two types of nouns differ consistently, considering in particular their semantic and morphosyntactic properties and behaviour.

In the literature the nominal alternation between count and mass nouns have been studied from various viewpoints. "Eschenbach (1993:5) reviews/studies form part of a long tradition in philosophy and semantics." Some of the most prominent works on this alternation include the following: Pelletier (1979a, 1979b), Ware (1979), Cartwright (1979), McCawley (1979), Chierchia (1982), Link (1993) and Eschenbach (1993) . Many of these studies concentrate on the semantics of these nouns with special reference to the issue of plurals or non-singular reference.

The study has the following specific aims:
(i) to present a principled classification of mass nouns within a list of nominal classes in Tshivenḓa,
(ii) to investigate the morphological features of these nouns,
(iii) to examine the syntactic features of these nouns, and
(iv) to investigate the semantics with special reference to the feature plural.

The study will be conducted within the framework of lexical semantics (Pustejovsky

1996). Within lexical semantics, a lexical item appears within a generative lexicon which is a computational system involving at least the following four levels of representations: Argument structure, event structure, qualia structure and lexical inheritance structure.

1.2 ORGANISATION AND METHOD

The study will address the following issues in depth, outlined below for chapter1-4:

Chapter 1 will present the introduction with the aims of the study.

Chapter 2 will examine the literature on mass nouns.

Chapter 3 will investigate the morphological and syntactic features of mass and count: according to Ware (1979:15) the distinction between count nouns and mass nouns is determined by the quantitiers and determiners that are appropriate to the nouns, e.g. numerals and universal quantifiers.

Chapter 4 will give the conclusions of the study as well as on investigation into the semantic feature of plurality. The feature number only appears in Tshivenḓa within semantics and not within morphology or syntax. Other semantic features which may need attention are the following: homogenous referents, individuation, cumulative reference property, non-sortals, logical polysemy, and meronomy.

The data for this study will be collected from the literature on count/mass alternation, as well as from the various nominal classes within WordNet (Fellbaum 1998). Nouns are classified within various nominal classes within this system and these nouns will be investigated from Tshivenḓa viewpoint to focus on the count/mass alternation. The analysis of these data will represent an interaction of the four semantic levels mentioned above in order to construct one system for the lexical semantic

representations of nouns.

The significance of this study rests in the fact that it applies a new model of enquiry for the properties of nominal alternation of count versus mass nouns in Tshivenda, and for the African languages in general. As stated above, it is the aim of this study to focus on the various levels of semantics within properties of lexical semantics on these nouns to establish why there is a necessity for distinguishing these nouns. It is known that nouns may also feature in other alternations such as individual vs. group nouns, partitives, relational nouns and others. It will thus be necessary to see why this alternation has to feature differently from the other alternations. The research undertaken in this study can be of value for work computational linguistics for the African languages like Tshivenda, eg. Computer language generation and analysis.

CHAPTER 2

OVERVIEW OF THE LITERATURE ON MASS NOUNS

2.1 AIM

The aim of this chapter is to give an overview of the most prominent words on mass nouns in general. The distinction of count versus mass nouns has been studied from various viewpoints with special emphasis on the semantics of these nouns with regard to the name of plurals or non- singular reference.

2.2 PELLETIER (1979a)

Pelletier (1979a) states that one of the goals of a certain brand philosopher has been to give an accounts of language and linguistic phenomena by means of showing how sentences are to be translated into a "logically perspicuous notation" (or an ideal language)

There are many candidates in logic (see Quine) (1960), higher-order predicate logic (see Parson). (1968),1970), intensional grammar (see Montague). (1969),1970a,1970b,1971), and transformational grammar (see Harman (1971), to mention some of the more popular ones.

The general problem is to determine what they will allow as linguistic data, in this paper he will restrict his attention to this general problem as it appears when they try to account for certain words with non-singular reference in particular, the word that are classified by the count/mass and sortal/non-sortal distinctions. According to Pelletier (1979) Nouns are normally divided into two classes: those in one very rarely occur with a determiner, and those in the other usually with 'the' (Connecticut is a state. **The** Connecticut is a river).

In the case of common nouns, there is general recognition that there are two quite difference from the behaviour of words like 'water', 'mud', and 'oatmeal' is quite different from the behaviour of words like 'man', 'state', and 'eye' (Pelletier will call the former 'mass' and the latter 'count', in keeping with accepted usage)

For elementary purpose, textbooks e.g. Gleason (1965) often gives criteria like the following:

Count nouns are so-called because they occur with numerals and can be used as either singular or plurals. Mass nouns do not exhibit the singular, plural distinctions: when used as subjects, they take singular verbs. The determiners used with mass nouns however, are more like those used with plural count nouns than those used with singular.

This may be brought out by a tabulation of grammatically comparable construction (from Gleason (1965:135).

the man is	the men are	the water is
a man	men	water
this man	these men	this water
-	few men	little water
every man	all men	all water
one man	two men	-
some man	some men	some water
-	some men	some water

This simple and elegant explanation of the syntactical difference between count and mass nouns will not suffice. First, it is claimed that count nouns, but not mass nouns, admit of numerals (and along with this is some related claim for pluralization).

The next criterion is pluralization: that mass nouns exhibit it. There are mass nouns that without change of sense admit of apparent (syntactical) pluralization:

e.g. 'beans' and 'potatoes'

(Pass the (mashed) potatoes, etc)

Another rather straightforward attempt might be: mass nouns but not count nouns admit of the prefixes 'much' and 'amount of'.

Frege (1884),page 66) explains four us:

The concept "letters in the word 'three'" isolates the 't' from the 'r' and so on. The concept "syllables in the word 'three'" picks out the word as a whole, and is indivible in the sense that no part of it falls any longer under the same concept. Not all concepts possess this quality. We can for example, divide up something falling under the concept "red". To a concept of this kind no finite number will belong. The proposition asserting that units are isolated and indivisible can, accordingly, be formulated as follows:

► Only a concept which isolates what falls under it in a definite manner, and which does not permit any arbitrary division of it into parts, can be a unit relative to a finite number.

The distinction is supposed to divide predicates that "provide a criterion for counting" from predicates that do not provide such a criterion.

This distinction is only clear in its broadest outline, and not much at all in details, in spite of the fact that so much of the recent philosophical literature presupposes it. Nonetheless, they are in a position to compare, generally the grammatical distinction, i.e. the count/mass distinction, with the philosophical one i.e. the sortal/non-sortal distinction, with the philosophical one, i.e, the sortal/non-sortal distinction.

According to Wallace (1964:70) runs the two together, Gleason (1965:135 – 137) tries to show that count nouns do what we admit only sortal, does. Queine (1960) uses the criteria for sortals and calls them count, and Moravesik (1970), while recognizing the two ways to make these distinctions, uses the sortal, non-sortal distinction and think that he has adequately characterized the count, mass distinction.

There are five important differences between the two distinctions:

First, the grammatical distinction applies only to nouns whereas the philosophical distinction is usually asserted to apply to all monadic predicates. e.g. the grammatical distinction does treat 'red' or 'spherical' at all, but the philosophical distinction is sometimes held to classify 'red' as a non-sortal and 'spherical' as a sortal.

Second, the grammatical distinction applies only to simply nouns, whereas the philosophical distinction applied to complex term e.g. it makes 'while man' and dirty water a non-sortal.

Third, certain count nouns are classified as non-sortal, e.g. 'thing', 'object', 'entity'

Fourth, the grammatical distinction will make abstract nouns such as 'speed' and 'knowledge' mass nouns, and make 'plot' and 'virtue' (in one sense) count.

Fifth, measures on mass nouns (e.g. lump of coals, gallon of gasoline) raise special problems. Some of these are divisive (e.g. 'lump of coal' or 'amount of dirt') and would probably be classified as non-sortal (although Wallace (1964) call 'lump of coal,' sortal and 'amount of dirt' non sortal).

The difference between the distinctions is a matter of focus. The grammatical distinction is supposed to describe the syntax of our language – it tries, without theory, to show us how to tell the one land of word from the other.

There are many nouns which have mass/count senses related in other senses related in other was 'I like chickens' versus 'I like chicken, pass the five potatoes' versus pass the (mashed) potatoes show the distinction occurring to biological, geological, or cultural norms, etc) and the matter of which it is made.

There is still some question about nouns which do not have physical objects in their extension-ungrindable things like unicorns (ungrindable because there are none of them to grind): are they the only true count nouns? The answer is no: it is not necessary that

the object actually be grindable, but only that a normal sentence use the word in a mass sense.

So there is at least a prima facie reason to believe that every noun must have (perhaps hidden) both a count and a mass sense. According to Gleason (1965), pp.136 – 137 reasoning similar to this is used: Are the limitations to this shifting (between count and mass senses)? At first there seems to be----but it is soon found that many of the ones with both uses are very much more frequent in one than in the other. The less frequent use occurs only in rather unusual circumstances. Water as a mass noun is common and widespread; as a count noun is nearly restricted to waiters even if the restaurant usage had not been observed, the pattern would remain and this use might arise at any time perhaps some of the other words would also show both uses if sufficiently unusual situations were conceived. This seems to be the case. For example, book and shelf are both fairly typical count nouns. With the present vogue for speaking animal stories, we can imagine one featuring a mother termite concerned over her child: Johny is very choosey about his food. He will eat book, but he won't touch shelf. This is a far-fetched, of course but it does suggest that every noun, given the right context, can occur in either type of usage, count or mass."

There are two kinds of objections one can make to this. First, we might object to this use of the counterfactual: if the counterfactual's antecedent is contradictory, can we always be assured grammaticality furthermore, all of it is written in present-day English thus this phenomenon arises within language, and is not simply a peculiarity the relation between language and the world. In contrast to this descriptive purpose stands the purpose of the philosophical distinction which is not intended to give a syntactical characterization but rather something we might want to call a semantical one.

The criteria usually proffered (as by Fregeabove) tell us that we should look to the reference of the term in question: if it "provides a criterion for counting" or if is not divisive or if it is not collective then it is sortal otherwise it is non- sortal.

Using the semantic criteria to judge whether a world (or word sense) is mass or count

will lead to impossible difficulties. To hold (as quine (1960) and Moravesik (1970) do that such criterial are sufficient to make this distinction, will to be hold that such criteria are sufficient to make this distiction, will be to hold that a syntactical theory cannot make use of the distinction (even if it were allowed that semantics can be settled befor developing the related syntax). For any syntactical theory will group 'thing' with 'man' and its like, and it will separate this group from the group containing 'water' and its like.

So a syntactical theory could could not not use the Quene/Moravcsik distinction because it does not group in this way, and point of making the distinction at all will be lost (except of course for its philosophical interest, but this is then the sortal/non-sortal distinction and ought to be called such.

Both Quine and Moravesik would find it difficult to give an account of a setence containing 'thing' According to the semantic criteria given by Quine, 'thing' is mass, so a sentence containing 'things' (plural) must be either ill-formed or else elliptical for a more complex sentence. e.g when we use a sentence containing 'water' - as There are two waters in this room; this elliptical for something like 'kinds of (or 'bodies of, etc) water in this room).

Part of the problem here seems to be that we want to cling to the grammatical distinction because it sands some chance of being clearly.

The second dispute, that the philosophical distinction treates even non-substantival phrases. According to Frege (18884) quote there is a certain problem surrounding his statement "we can divide something falling under the concept 'red' in a various of ways ----.

Words such as 'heavy' and 'light' would seem to be examples of non-sortal terms, since they do not divide their reference into discrete objects. The fourth point of dispute, terms with non-physical objects in their extension, seems to me to be best settled by not having the philosophical distinction applied to them at all – i.e. strike them from the (revised) grammatical distinction which we have when we are generating the sortal non-

sortal distinction. The reason for this is that such terms have "appropriate space" within which to judge whether it is or possible to count how many there are.

Only the third difference, non-sortal count terms, remains to be settled. Some examples of these are "thing", 'white thing', and 'physical object'. According to traditional wisdom, some phrases containing these are sortal, some not. On the other hand the simple phrases 'physical object', 'while thing', etc, are taken to be applied.

Many people (e.g. Geach (1962), p 148) brand sentences with such phrases as 'meaningless', because they do not refer to a particular thing or group of things. Pelletier suggests the following: In the sentences where 'thing (or a phrase containing 'thing') is being used as a proxy for some other term (as in 'thing that is wise') if 'thing' is replacement will always be by a sortal.

For all sortals s. and any x is white s. then x is white, and so on. Sentences like 'water is wet', Mercury is dry, etc--- are perfectly normal (from both the grammatical and philophical point of view) and yet 'All stuff is fluid in nature seems to pass only the tests for grammaticality but not those for straightforward intelligibility, since no definite stuff has been picked out for us to say something about or predicate anything of.

For simplicity let's agree to all normal sortal predicates "sortals", normal mass nouns "mass nouns", 'thing' and its relatives "secondary sortals" and "super sortals" corresponding to whether it "goes proxy" for a sortal or it constructed as quantification over sortals and 'stuff' and its relatives "secondary mass nouns" and super mass nouns" for all the corresponding two cases for mass nouns.

Thus for monadic nouns phrases that are not measures on mass nouns at least, we have a pretty clear grasp of what is a sortal according to traditional wisdom. Non-sortal according to traditional wisdom are what Pelletier calls super-sortals, together with all our mass nouns (normal, secondary and super.

For instance, to get the sortals from the counts, all that we have to do is to:

(a) include all noun phrases

(b) delete abstract nouns phrases and measures on mass nouns

(c) distinguish "proxy" and "super" count nouns from the rest, and

(d) reconstruct these two kind of count nouns correctly (find the right word it goes "proxy" for, or find the proper quantifier phrase).

2.3 PELLETIER (1979b)

Pelletier (1979b viii-xii) distinguishes mass terms, count terms and sortal terms as follows: The main, examples of mass terms are easy to come by, water, smoke, gold. They differ in their syntactic, semantic, and programmatic properties from count terms such as 'man' star, wastebasket etc. Syntactically it seems, mass terms do, but singular count terms do not, admit the quantifiers phrases much, an amount of, a little etc.

According to Pelletier (1979b) count terms use the quantifiers 'each', every some, few, many and they use a(n) as the indefinite articles. They can, unlike the mass terms, take numerals as prefixes.

Mass terms seem not to have a plural. Semantically, Philosophers have characterized count terms as denoting individual objects where as what mass terms denote are culmulative and dissective directive (that is, a mass term is supposed to be true of any sum of things (stuff) it is tru of, and true of any part of anything which it is true). Pragmatically, it seems that speakers use count terms when they wish to refer to individual objects, or when they wish to reidentify a particular already introduced into discourse. The semantico-pragmatic distination was introduced into philosophy in the 1950s, it was sometimes called the 'count/mass distinction, but even more often called the 'sortal/mass' distinction.

Pelletier (1979) in his 'non-singular reference some Preliminaries' he tries to give an

account of how the philosophically interesting distinction "sortal/non-sortal can be generated from the syntactical distinction "count/mass", which latter distinction is claimed to be philosophically uninteresting.

Ware (1979,20) in his articles 'some Bits and Pieces' deals also with these issues, but his "sceptical" conclusion is that there is no way to decide for many uses.

Helen Cartwright's some remarks about mass nouns and plurality' tries to establish the philosophical interest of the count/mass distinction, and show that the "skeptical" remarks to the contrary made in both her and ware's articles can be circumvented by a notion of structural ambiguity.

2.3.1 QUESTIONS OF ONTOLOGY

According to Pelletier (1979 One area of philosophical application is in the realm of metaphysics: mass terms apparently denote stuff and count terms apparently denote things. Many writers have taken the position that our conceptual scheme presupposes an ontology of things, and therefore that sortal terms set the paradigm for prediction. But since things are made up of or are constituted by or are defined in terms of stuff, it would seem that the proper statement of an ontology should include a discussion of the denotation of these kinds of terms and a discussion of how the constitution-relation operates.

Richard Sharvy tries to establish that there is a parallel between Quine's "indeterminacy of reference" of count terms and certain properties of mass references. Pelletier argued in response that it is not proved that Sharvy's mass-indeterminacy is any different from the count – indeterminacy.

Eddy Zemach's well – known article; 'Four onthologies', lays out a "type ontology" according to which "types" are fully real particulars bounded neither space nor time. Zemach thinks the outology is most plausible when talking about masses, but there are sufficient similarities between masses and other types ("count types") to make it acceptable for describing ordinary discourse in the count as well as the mass case. John Bacon has criticized this type ontology in "Do genetic descriptions denote? Mind (1973) and "The Untenability of General, Logique et analyse (1974), and Zemach answers these criticisms in his 'On the Adequacy of a Type ontology.

Henry Laycock's articles 'Theories of Matter' is a defense of the view that the basic ontological category is that of matter, and that correspondingly, mass predication is more basic than any sort of court predication. Laycock also took to task Helen Cartwright's doctrine that occurrences of a mass term M are to be understood by the phrase 'quantity of M.

2.3.2 THE LOGICAL FORM OF SENTENCES WITH MASS TERMS

One way a certain kind of philosopher explains his ontological doctrines is by showing how to cast ordinary language sentences into a formalized language. Analysis of Mass Terms and Mount Terms, which is reprinted here. The articles has evoked criticisms from many sides and Parsons responds to them in his 'Afterthoughts on Mass Terms'.

Cartwright (1973) in her 'Amounts and Measures of Amounts' investigates some ramifications of her earlier work on quantities; in particular, she is here interested in the formal properties of measurements of quantities. It also brings out rather clearly how Parson's work on "applied amount phrases" can be adapted to fit her intuitions about quantities.

Burge (1973) in his 'Mass Term, Count Nouns, and Change', contrasts two approacheds to the logical representation of sentences containing the phrases 'is M' and is the same M as '(where 'M' stands for some mass term). One approach – the

Constitution – Approach alters the analysis of 'is M' from the traditional 'M(x)'. The other approach – the Relational approach alters the analysis of 'is the same M as 'from the traditional' M (x) + x = y. Burge brings out difficulties in the Relational Approach, and therefore opts for the Constitution Approach.

Richard Grandy's 'Stuff and Things' is an attempt to defend the Relational Approach. The approach, as given by Grandy, distinguishes between first and second-level predicates where mass predicates are first-level and sortal predicates are second-level.

Brian Chellas in his commentary on Grandy's paper, brings out some further difficulties with the Relational Approach. Gabbay and Moravcsik's paper 'Sameness and individuation' presents a theory which is "somewhere between the Constitution – and Relational Approaches", to use Burge's characterization.

Mereology mirrors the semantics of mass –terms by the presupposing that the denotations of the terms satisfy the cumulativity and divisiveness conditions. The method has been applied in various ways of and with varying degrees of success, by moravesik (mass terms in English). In this volume, H.C. Bunt gives a detailed presentation of his "ensemble theory", which is an adaptations of mereology.

George Bealer investigates an analysis of the logical form of sentences involving mass terms according to which 'is' is an unambiguous term. Bealer distinguishes "extensional entities" such as propositions, qualities, and relations; and he introduces a relation called 'comprehension'.

2.4 WARE (1979)

According to Ware, these are some bits and pieces on the distinction between count nouns and mass nouns in an attempt to investigate the semantic and / or ontological significance of that distinction.

Count nouns are nouns like 'label'", 'fable' and 'table', and mass nouns are nouns like 'milk' and 'honey' and 'silk' and 'money'. The distinction between count nouns and mass nouns is notoriously difficult to make and a variety of criteria have been used, so part of what he argues is that the distinction that he makes is appropriate to the reality of our language and the world.

He maintains that the distinction between count nouns and mass nouns is determined by the quantifiers and determiners that are appropriate to the nouns. Count nouns are distinguished by their taking the indefinite article,' many', few 'one', and other number words. They are called enumeratives.

Mass nouns are distinguished by the appropriateness of what he will call amassives, words like 'much', little, and 'less'. It is necessary to speak of the appropriateness of quantifiers and determiners to nouns, since nouns in their various occurrences do not always appear with the distinguishing quantifiers or determiners. But there are ways of knowing what the meaning of a word is in its particular occurrence, and from knowing the meaning we can know, for example, the appropriate predications even though they are not found in that occurrence. There is a determinate grammar of an occurrence of 'He's at the bank' just as there is a determinate meaning.

The plural has also been taken as away of distinguishing count nouns from mass nouns, but this can have the danger of clouding the issue. For one thing, it is not always clear whether a word is in the singular or plural. We can easily become confused by words like 'news', 'woods', and politics. But being able to isolate grammatical plural does not assure us of making the distinction between mass and count.
Perhaps a plural occurance is a criterion for a word not being mass. The lack of both count and mass is also found with most nouns with the suffix –'hood' (some exceptions are 'falsehood' and 'brotherhood') and some nouns with the suffix – 'ness' or –'ity', as in nearness, 'appropriateness', and 'chastity'.

Thus the distinction between count nouns and mass nouns using enumeratives and amassives is not exhaustive; nor need it be. One final consideration is whether the

distinction is a unitary distinction, remembering that it uses a variety of determiners and quantifiers. If this were to make our distinction unsatisfactory, we could restrict our criterion to the appropriateness of 'many' and 'much', but there are very few words that show this lack of unity, and in any case he thinks his remarks will be independent of any decision on this matter.

Something now needs to be said about the exclusiveness of the distinction and the reason for his putting the distinction in terms of noun occurrences. The problem arises when we realize that some tokens of homophonic nouns (with or without the same meaning) are count nouns while others are mass nouns. Granted these words have differences in meaning and must be distinguished just as we distinguish 'wood' (the wood in our woodpile) and 'woods' (the woods that we hide in).

But this is the very reason that we have to took at noun occurrences, that is in order not to beg the question about whether the same noun can be both a count and a mass noun. There can also be too much or too many body (ies) or material (s). There can also be too much or many justifications, consideration(s), and similarity(ies).

Pelletier's claim is that since everything can go in, everything can also come out as stuff, and the appropriate homophones have mass as well as count occurrences. He also claims that it is enough that it only works for physical objects.

So there are a number of cases where homophones that normally have count occurrences also have mass occurrences and vice versa. This is coupled with the fact that there are many homophones for which count occurrences and mass occurrences are equally common. A few examples to add to the list are 'homburger', 'candy', 'ballet', 'meaning', and 'hope'.

Words for orifices seem to have count but not, mass occurrences, for example: 'Opening' , 'hole' and 'mouth'. We would also be hard pressed to find mass occurrences for 'peculiarity', 'trick', 'act' and 'occurrances'. On the other hand the following seem to be homophones with mass occurrences but no count occurrences: 'fun', 'moisture', 'gratitude', 'carelessness', and 'audacity'.

There is certainly no way of telling that deep down there was 'cup', 'mug', 'order', or 'bit' deleted, certainly no general deletion can be found for all of these expressions. Another problem with attempting a deletion theory is that it does not give us any understanding of homophones for which count occurrences are prior or primary, as appears to be the case, for example, with 'lamp' and 'steak'. There are numerous cases of homophones with both count and mass occurrences that are well established.

Quine suggests that one of the two kinds of occurrences will be the shadow of the other, but this need not be the case as it appears with 'hamburger'. Nouns cannot be divided into those that are count and those that are mass with a saving grammatical theory for irregularities. Most nouns can have a role as either a mass noun or a count noun. 'Cup' and 'saucer' are usually count nouns, and 'sugar' and 'spice' are usually mass nouns.

Some nouns like 'iron', 'candy, 'faculty', and 'experience' are equally at home in either role. The same question arises about nouns when they occur as noun modifiers as in

'snow man' and 'tape recorder'. On the other hand we have constructions that give us what look more like mass occurrences, often of nouns that we expect usually to have count occurrences.

Larouse Gastronomique gives directions for making essence of onion and shallot and of tomato. In this context there are some noun modifiers, as in 'long cabin', 'brick building', and 'stone wall' that have mass occurrences giving us the stuff of the thing. There is a count/mass differences between 'fruit' and 'vegetable', but they apply to things that for all accounts and purposes seem to be a like.

These are normally mass nouns and count nouns for basically the same thing. It is equally curious that 'success' is often a mass term while 'failure' rarely if ever, a mass term. Our language ossifies according to established linguistics conventions so that grammatical distinctions are not sensitive to scientific progress and change.

We follow the linguistic conventions of our language and form our communicative intentions without necessarily having corresponding commitments about counting or measuring.

Some have said that the definite article is appropriate only to count nouns and not to mass nouns. On the other hand, it would appear to give all nouns a count occurrence``. In the first case, there is no presupposition at all that there is wheat, but in the second case there is a presupposition that there is the wheat one is referring to.

Laycock claims that there cannot be any reference to particulars in the examples he has given above because there are no criteria of distinctness incorporated. In using the definite article, context allows us to pick out and refer to particular bits of stuff.

The conventions of packaging constitute one factor in determining criteria for individualizining that get established in our linguistic conventions. But there are many other factors coming from our interests and practices that account for the establishment of linguistic conventions' without any broad generalizations available.

Branding irons, golf irons, and laundry irons are only a few of the kinds of things that are made predominantly of iron, and it has just happened that linguistic conventions have not been established to call most of the other kinds of thing iron. Linguistic conventions can establish the appropriateness of count and mass occurrence depending on our interests and practices.

The point of all this is that we have numerous ways of individualizing the world, which means that we also have numerous ways of gathering stuff together. Linguistic conventions get established without necessarily being reflected in communication intentions. When we use 'consideration and 'difference' as count nouns or as mass nouns there is no reason to believe that we are either counting or measuring.

Moreover, even when we are using nouns for which individualizing or amassing is normally appropriate there is sometimes an indefiniteness in the meaning and grammar of the noun occurrence. Often it is not obvious from what we hear or see on the surface which group of quantifiers, enumeratives or amassives, are appropriate to a noun occurrence. In these cases, the communication intentions of the speaker are all we have to determine the appropriateness of quantifies.

That is something that may not be determined by his communication intentions, thus leaving a communicative gap. Not all communicative gaps will be acceptable however. This might even provide a criterion for individualizing words, by saying that there is a difference of words if the communicative gap is unacceptable.
At this point, however, it seems unimportant how we individualize words as long as we can establish the grammar and the meaning of the occurrences of homophones. One concerns the communicative gap where the count/mass distinction is sometime left out of the communicative situation, and the other concerns a difference between the grammatical distinction and semantic accounts.

Even where the count/mass distinction is included in the communicative situation individualizing and amassing does not always follow according to count and mass occurrences.

2.5 CARTWRIGHT (1979)

According to Cartwright (1979) there is a distinction between words and phrases with the grammatical features of a count noun, a noun regularly used with 'many' and 'few' in the plural and 'an' in the singular, and words and phrases with the grammar of a mass noun, a word which, among other things, lacks these features along with the contrast between plural and singular.

'Ring,' gold ring, 'mental', 'rope' 'rope from which he hung', are examples of count nouns, examples of the mass nouns are 'water,' 'mental' 'rusty metal,' rope all over the floor.

Both count nouns and mass nouns are nouns; they occur with demonstratives and with "the" and 'the same'. Examples are: 'This water', 'the water in the pot' and 'the same water' look very much like 'this ring' 'this ring on my finger' and 'the same ring; and analogy invites the suggestion that the grammatical distinction reflects a systematic semantic difference in particular, an ontological difference. Rings are individuals, full-fledged objects or substances, words like 'water' are names of stuff or matter.

And those sceptical of the existence of anything here of philosophical interest can only draw comfort, as it seems to me, from at least one way in which Jespersen introduces the distinction.

By contrast with 'countables or 'thing words,' there are a great many words which do not call up the idea of some definite thing with a certain shape or precise limits. She calls these 'mass-words,' they may be either material, in which case they denote some substance in itself independent of form, such as silver, quack silver, water, butter, gas, air---etc; or else immaterial, such as leisure, music, traffic, success, tact, commonsense and---satisfaction, admiration, refinement, from verbs or---restlessness, justice, safety, constancy, from adjectives.

And the added hints here quoted – especially the opening remark – are of little help in trying to grasp the general contrast he is after.

There is an important contrast to be made nonetheless, she thinks. Quine follows Jesperson only in part in his use of 'mass term', a label which covers what Strawson has called 'material names,[3] and there is here perhaps the basis for a more conservative classification. Strawson's distinction between 'material names' and substance names[4] does not coincide with Quine's distinction between 'mass terms' and 'general terms,' but where their usage overlaps, so in some important ways do their views. According to Strawson, substances names (count nouns) "provide a principle for distinguishing, enumerating and reidentifying particulars of sort" (11,202).

According to Quine, general terms, by contrast with mass terms, "possess built-in modes, however arbitrary, of dividing their reference" (91). Mass terms, on Quine's account, fall outside a scheme of classification intended to illuminate the nature of reference and the ontological issues associated with it.

Now she has argued elsewhere that mass nouns like 'water and 'gold' contribute no less to the adult business of reference than count nouns do and she means to pursue the point again.

And while any very complete defence would call for further elaboration of the views of Quine and Strawson – doubtless also some general discussion of various other ways in which linguistic phenomena are currently described, these remarks are intended primaryly to ward off sceptiecs by simply calling attention to some misconceptions as to just where – in the context of any one's theory the difference marked by grammar is to be located and she will have very little to say beyond this.

She mean to argue first that, contrary to what she has so far suggested, what is in question is not at bottom a difference two classes of words or classes of words and phrases, or their occurrence, or their senses.

Helen began with a rough description of a syntactic distinction – grammatical distinction between classes of nominal forms

Jespersen's cases include:

A little more cheese	two big cheeses
It is hard as iron	a hot iron (flat iron)
Cork is lighter than water	I want three corks for these bottles
A parcel in brown paper	state papers
Little talent	few talents
Much experience	many-experiences

And Cases like Quine's

Put some apple in the salad.
Mary had a little lamb.

We can agree that all these cases involve a difference in sense of one kind or another; and that some involve, 'lexical' ambiguity- i.e., Very roughly, word ambiguity of a sort one would expect to find recorded in a dictionary. It is not obvious, in the first place, that Quine's 'apple' is ambiguous at all. A comparable switch would probably not do, had we begun with 'Put same chicken in the salad'-unless it were a very large salad. And for the same sorts of reasons it seems to me implausible to say in the other direction that there is a shift in the sense of the mass noun "beer" if one says 'He had a couple of beers – or, for that matter, that Jespersen's cheese and 'paper' are ambiguous.

If, in very such case, a shift in sense is to be laid to the sense of a word – count noun or mass noun – a sceptic might well argue that the choice of one form or the other depends on nothing of systematic interest, but on a variety of factors, psychological and

practical, perhaps on nothing at all.

Finally, the differences recorded above involving 'talent' and 'experience' are not like those so far considered nor, in any obvious way, like one another. Doubtless a dictionary should record illustrative uses along with the facts that both forms regularly occur, if they do. Quine's program calls for only two categories of nominal forms – singular and general in the philosophical parsing of English sentences.

5. Consider now
1. Water is a fluid
   Water is fluid (colorless)
   Water flows

Lamb is scarce (plentiful, disappearing).
Petroleum is various in origin.
Flues is a necessity.

(2) Lions are a carnivore.
   Lions are carnivores.
   Lions like red meat.
   Lions are scarce (numerous, disappearing, windespread).
   Apples are various in origin.
   Shoes are a necessity.

Most of these example are Quine's and according to his well known view the unmodified mass nouns in (1) are singular terms designating objects which are or may be 'scattered,' 'Water' there "differs none from such singular terms as 'mama' and 'Agnes,' unless the scattered stuff it names be denied the status of a single sprawling object (98).

Further, Quine has on his side, as it seems to me, the fact that the result of prefixing 'all' to any of the sentences in (1) results at best in a questionable paraphrase.

After regimentation we have something like:

W (snow), s (the stuff in the yard): therefore

W (the stuff in the yard)

Now it seems to her that the sentences in (2) can be described in analogous fashion and for the same sorts of reasons. Quine says of sentences like 'Lions are numerous' that the plural" --- does the work of an abstract singular term designating the extension of the general term (i.e. the class of all the things of which the genera term is true)---" (134)

According to Quine, the trouble is that the plural form "lions" in Lions like red meat"--- does the work merely of the singular with 'every' (134). Moreover, if according to Quine we are permitted the paraphrase with 'all' in the plural case, we should similarly read "Snowing is white" as All snow is white after all, and Quine would reject my defence of his claim about the unmodified mass nouns in (1).

There is a harder question as to what he takes 'lions' – as a singular term – to designate. Lions are a species, a large feline animal, native to Africa, frequently found in zoos. There is a difference between a kind of thing and class; with very few resources for saying what it is, I think there is a corresponding difference between an object which may be scattered and a kind of stuff.

And notice there is yet a third possibility for the regimentation of the argument discussed above, whose major premise is' Snow is white'

W (snow) ; the stuff in the yard = snow, therefore

W (the stuff in the yard)

Now it may be that all that sound metaphysics can salvage of such Aristotelian talk of kinds is rough paraphrase in terms of classes and scattered objects.

But sound metaphysics aside there is an important difference between (1) and (2) on

the one hand and on the other.

(3) This water is frozen.

   The wine in the cupboard is fast disappearing and

(4) And the lion in the cage like red meat.

   These apples are various in origin.

In (3) and (4), where grammar permits its occurrence, 'all' really is superfluous; and here it seems altogether natural to speak of sets and particular scattered objects.

But especially in light of his difference with Strawson, it seems important to give them separate treatment. Indeed it is at least tempting to say that the unmodified mass nouns and plurals of (1) and (2) are not to be salvaged as full-fledged singular terms all at all, that these sentences. Share some of the characteristics of Strawson's feature – placing statements and "do not introduce particular into our discourse" but only 'general features,' and that their unmodified subjects function in the way Quine describes the use of mass nouns as a lexical class.

Their use is as in Quine's Ernest is hunting lions, "if what is meant is not that he is intent on a certain lion or lions but just that in his unfocussed way he is out for lions" (p.134). This reading of the sentence need not be laid to the opacity of the verb (hunt); 17 consider.

   Ernest breeds lions.

   John grows house corn.

With which we may compare

   Ernest produces furniture

   John grows corn

This sort of use is one which is self-consciously vague and non-committal, available for deception as well as honest communication.

And given this suggestion, there is something primitive or archaic about the unmodified mass nouns in (1): is assimilated to that of the subjects of the subjects of the sentences in 3 for unless the function of the subjects of sentences in (1), there is no obvious connection between such constructions and the sophisticated apparatus of quantification theory. And whatever shift occurs in the function of 'water' from (1) to 3 – evidence on Quine's view of the 'protean' character of mass terms – is shared by 'Lion' in going from (2) to (4).

Quantification theory gets a purchase only in the presence of those particle which are reflected somehow in its notation'

The following are not pairwise equivalent.

(5) John sold some butter and Bill bought it.
      John sold some eggs and Bill bought them.

(6) John sold butter and Bill bought it.
      John sold eggs and Bill bought them.

(5) but not (6) requires a reading according to which Bill bought the same butter and eggs John sold.

Some like 'an' is often logically superfluous, but those cases in which it is 'understood' – since unlike 'an' grammar does not require it – need to be distinguished from those in which it is not. Consider another example some to be basic to any account.

(7) My ring is gold

Another example some take to be basic to any account of the function of massnouns.

(7) invites a rendering of the copula as 'is made of' or 'is composed of.' (7) seems to me unfortunate for other reasons: but surely the view one chooses to adopt depends heavily on whether or not (7) is equivalent to

My ring is some gold

8. Cartwright suggested that views like those of Quine and Strawsons are in need   of supplementations by some account of the significance of the grammatical analogy between mass nouns and plural forms.

For

This lion the some lion as that

We have

(8) These lions are the same lions as those

This water is the same water as that

but not

(9) Lions are the same lions as…

Water is the same water as…

At any rate it is worth thinking about the oddities of (10)' John's leisure (success, music, tact, satisfaction, safety) is the same leisure (success,…) as…

And the fact that 'experience,' 'talent' 'thought,' and 'pain' in such contexts can only be count nouns. But if the ambiguity is no worse than that which constructions containing 'metal' share with those containing ''bird' and sentence like (3) and (4) are parsed in Quine's way; then Cartwright's suggestion can be put in straightforward ontological term. For here Quine finds a sharp distinction, and grammar suggests the opposite.

2.6 CHIERCHIA (1982)

The work of Carson (1977) has brought us several steps forward in our understanding of such problematic structures as bare plurals in 'English'. Carlson's approach has left

several problems open, however, and in what follows Gennaro Chierchia would like to sketch a way of extending Carlson's theory to incorporate a treatment of mass nouns.

The central idea of the present approach is that both the formation of bare plurals and of nominal mass nouns are regarded as nominalization that is to say of the transformation of an expression that semantically denotes a property into something like a proper name.

(1) (a) dogs are mammals (all)

  (b) dogs are intelligent (most)

  (c) dogs give live birth (most of the female dogs)

  (d) dogs are barking in the courtyard (some)

  (e) dogs are numerous (?)

(2) (a) gold is an element

  (b) John hates gold

Linguists usually regard nominalization as having to do with sentences or propositions as in the following example.

(3) (a) that John eats a sandwich is disgusting.

  (b) John's eating of the sandwich is disgusting

Consider the sentences in (5) through (10)
However.

(4) John is fun.

(5) (a) Mary wants John to dance.

  (b) to dance is fun.

(6) (a) Sara sees Ben dancing

(b) dancing is fun.

(7) (a) Ben is honest.

(b) honesty is a virtue

(8) (a) My pen is blue.

(b) Blue is a colour.

(9) (a) My ring is gold.

(b) Gold is an element.

(10) (a) Bully and Bova are dogs

(b) Dogs are mammals

In these examples items that semantically act as predicates in the **a** cases show up as something that is the subject of a predicate and looks pretty much like a Noun phrase (NP) in the **b** cases. By nominalization, Gennaro, chierchia will refer to the transformation of sentences, verb phrases, common nouns and other items into structure displaying nominal properties, thereby extending somewhat the traditional linguistic terminology.

The problem that arises, then, is what the semantic of this process is: what do nominalized items denote. In (5a) and (6a) the property denoted by to dance and dancing is attributed to an individual, namely John.

In (5b) and (6b), however, the property of dancing itself appears to be an individual, an activity which is fun.
The data in (5) through (10) thus suggests that in natural language semantics it should be possible to regard properties as individuals. Properties should be allowed to be the subjects of predication.

A few example that might be interpreted in this way are given in (11)

11 (i) being confusing is confusing.

(ii) being foolish is foolish.

(iii) being crazy is crazy.

(iv) being fun is fun.

(v) being rare is rare.

(vi) It is forbidden to forbid.

(vii) It is hurting that really hurts.

(viii) 'some hate nothing at all except hatred'

The theory of properties and predication that Montague built into his semantics is based as is well known, on the theory of types. As an example of the kind of problem one encounters, consider the predicate be fun. A type theoretic treatment of predication forces this predicate to be of two different semantic types when it is attributed to an individual (as in (4) and when it is attributed to a nominalized verb phrases (VP) or sentence (s) as in (5b). In his introduction to Montague (1976), Thomason claims that one of the roles of type theory is to represent how items of different syntactic categories differ in meaning. With respect to this task, however, the way Montague cast the relation between categories and types appears to be inadequate.

A functional dependency between categories and types is too weak because it doesn't allow us to represent enough distinctions between types of meanings.
For examples, common nouns (CN) and intransitive VPS are treated as objects of the same semantic type. But they clearly are different sorts of semantic objects. It is too strong, because several syntactic categories have to be associated with objects of different types.

This has been argued for in connection with factives by Delacruz (1976), with plurals by Bennet (1976), with infinitives by Partee 1977, with the analysis of conjunction by Rooth and Partee and others. Parsons (1979) has suggested alway of having a systematically looser relation between categories and types. It has been recently proposed that a quite tight, and therefore interesting constraint on the transformational component of grammar would be that there are no transformation e.g. Gazdar (1980).

By analogy, a quite tight and therefore interesting characterization of the relation between categories and types would be that such a relation is empty, because there are no types.

If type theory as it is doesn't work properly, the right framework for handling nominalization might be constitute by a type free theory of properties. In Chierchia (forth coming) he has tried to develop a version of intentional logic by N. Cocchiarella (see e.g. Cocchiarella (1979) that seems to provide such a theory. Semantically, to interpret such a system we need a way of embedding properties into the domain of individuals, and this is what Cocchiarella's system provides. Turner has worked out an application of D. Scots semantics for the calculus that achieves roughly the same effects and there are other theories of properties that might work as well (see e.g. Bealer (1979) or Jubien (1981).

2.6.1. Carlson's approach to bare plurals

In what follows, Gennaro Chierchia will have to assume familiarity with Carlson (1977). Carlson's main thesis is that it is impossible to analyse bare plurals by postulating a phonetically determiner that would make them much like explicit quantified NPs. Rather, the scopal, anaphoric and referential properties of bare plurals are very similar to those of proper names. The main data that seems show this is reported from Carlson (1977) in 12 through (25)

(a) Opacity

(12) Mary wants to meet some football players (two readings of some football players: one opaque, one transparent)

(13) Mary wants to meet football players (one reading of football players: opaque).

(b) Narrow Scope

(14) A man is in this room and a man is not in this room (two readings, one contradictory, one not).

(15) Dogs are invading the courtyard and dogs are not invading the courtyard (one reading, contradictory)

(c) Differentiated Scope

(16) Max killed a rabbit repeatedly last night (a rabbit has scope over repeatedly)

(17) Max killed rabbits repeatedly last night (repeatedly has scope over rabbits)

(d) Anaphora

18) Andrew is trying to find a policeman and Mary is trying to find him too (only transparent reading of a policeman)

(19) Andrew is trying to find policeman and Mary is trying to find them too (only opaque reading of policemen

(e) Differentiated antecedant

(20) Mary hates racoons because they stole her sweet corn (generic by NP antecedent of existential by NP)

(21) Since racoons stole her sweet corn, Mary hates them (existential by NP antecedent of generic by NP

(f) Predicates selecting kinds

(22) Unicorns are widespread (rare, in short supply, etc.)

(g) The port – royal puzzle

(23) Italians are goods skiers (true)

(24) Italians are skiers (false)

(25)   (a) good skiers Italians.

     (b) skiers Italians.

     (c) [good skiers] skiers.

What (12) – (17) show is that bare plurals do not interact with other scope bearing elements in the way that overtly quantified NPs do. (18) – (21) illustrate anaphoric properties that also differentiate sharply bare plurals from other Np's. Finally (23) – (25) show that if bare plurals were quantifiers in the same sense in which every man is, they would not be monotone there by providing a counter example to an otherwise well attested universal of semantic theory (see, on these issues, Barwise and cooper (1981).

As Carlson argues, we can make sense of this type of evidence by assuming that bare plurals act as names of kinds of things, and that the different readings that arise in different contexts depend on lexical properties of classes of predicates and on features of the English aspectual system. Essentially ,there seems to be a class of VPs (such as be drunk, be on the roof, be running to class) that denote properties of stages of individuals, while other VPs (such as be intelligent, be a man, know Latin) denote properties of objects.

Stage – level VPs select the existential reading of bare plurals, object – level VPs the "universal" one. Carlson also introduces two relations, R and R, that connect individuals to their stages and kinds to their instances. Carlson introduces this apparatus into grammar of English using meaning postulates, together with a set of stipulations concerning the translation mapping from English into IL.

The characterization in terms of meaning postulates Carlson provides often appears unsatisfactory, moreover. It seems, therefore, that we could regard kinds simply as what we could regard kinds simply as what nominalized (CNS denote (see also Cocchiarella (1976). There are also more conceptual kinds of problems for the notion of stage. In intuitive terms, a stage is said to be something like a spatiotemporal section of and individual.

2.6.2. A MODIFIED THEORY OF BARE PLURALS

In the rest of this paper, Gennaro Chierchia would like to propose an analysis of the notion of stage that, while being extremely simple, allows for stages to integrate

naturally various of the current analysis of tense and to play an interesting role in theories of Aktionsarten.

There seems to be a couple of minimal criteria of adequacy for a formal analysis of the notion of stages. First, the difference between stages and the inhabitants of our common sense world ought to involve primarily a difference in criteria of identification. Now roughly speaking, the identification of "thing" seems to require concepts of a sortal nature while the identification of stages doesn't seem to. Secondly, stages seem to have a mereological nature: take some realization of the kind of dogs and add to it another realization of dog-kind, and you will get a new dog-realization.

An analysis that appears to satisfy minimally these criteria could consist in regarding stages as portions of stuff, or quantities of matter. Thus the notion of stage would not be introduced as a new primitive, but would, instead, be reduced to a notion that has been argued to be independently needed. Thus 'things' in our now technical sense would be analysed as a particular sort of individual concept.

Given this view of stages and 'things', common nouns and in general what we have called characterizing properties would be treated as something like sets of individual concepts Episodic properties denoted by VP's like run or hit would by analysed as sets of portions of stuff. The present approach thus suggests that the difference between states, on the one hand, and processes and events on the other might be a difference concerning the kinds of entities involved.

Our approach allows us to define explicity Carlson's realization relations R and R'. So, for a stage to realize a "thing" will simply for it to be the 'thing's value at some point of reference. These meaning postulates impose the desired semantic structure on CNS and stative VPs (regarded as sets of individual concepts) and on non stative Vps (regarded a sets of portions of stuff). They can be most naturally considered a fragment of a theory of the aspectual system of English. So, the present approach

seems to have several appearing features. It provides a sharp model – theoretic account of the notions Carlson has introduced, and it does so by using very little.

Linguistically relevant generalizations are thus captured in purely semantic terms, simply by resorting to a set of meaning postulates terms of imposes some structure on classes predicates.

2.6.3 MASS NOUNS

Term meulen (1980) has argued that there are two types of mass nouns. Predicative mass nouns are syntactically of the category CN, and they denote sets of quantities of matter, so, for instance, "this ring gold" means something like "this ring is a quantity of gold." Nominal mass nouns (or mass terms) are NPs that act as names of substances, where substances are analysed as the intension of mass common nouns (i.e. functions from point of reference to sets of quantities).

Bare plurals NPs and mass terms are governed by the same grammatical process, nominalization, and thus predict they ought to display the same properties with respect to scope, anaphora, and other linguistic phenomen, They analyse nominalized CNS, are to denote kinds, hence should behave like other kind-denoting NPs. In (37) through (47) Gennaro chierchia have reproduced for mass nouns the entire diagnostics that Carlson uses to individuate kind – level NPs.

(a) Opacity
(37) Mary wants to find some gold.

   (two readings of some gold: transparent and opaque).
(38) Mary wants to find gold.

   (one reading of gold: opaque).

(b) Narrow scope

(39) Some gold was found and some gold was not found.

   (two readings: one contradictory, one not).

(40) Gold was found and gold was not found

    (one reading: contradictory)

(c) Differentiated scope

(41) John polished some silver repeatedly last year .

   (preferred reading: some silver has scope over repeatedly)

(42) John polished silver repeatedly last year

   (repeatedly has scope over silver)

(d) Anaphora

(43) Mary is digging for some gold and Bill is digging for it too.

   (only transparent reading of some gold)

(e) Differentiated antecedent

(45) Gold is expensive but John keeps buying it

   (generic mn antecedent of existential mn)

(46) Mary bought gold because she likes it

   (existential mn antecedent of generic mn)

(f) Predicates selecting kinds

(47) Gold is rare (in short supply, getting expensive, etc.)

To see this in detail one would have to present a fragment of English with bare plurals and mass nouns encorporating the theory presented here, an enterprise that cannot be carried on within the limits of the present paper. What is possible to do, however, is to give an example of how the analysis of bare plurals would carry over to mass nouns within a fragment like the one presented in Chierchia (forthcoming).

(48) (a) water is flooding the city

The reduced translation of (48a) says roughly "there are realizations of the substance – kind water that are flooding the city" But realizations are just portions of matter.
It is also interesting to point out that ter Meulen argues for the name – like character of nominal mass nouns on the basis of evidence that intersects but does not overlap with the one considered by Carlson. For example , she argues that nominal mass nouns pattern like names in that they licence backwards anaphora much more easily than overtly quantified NPs, as shown in (49) – (52)

(49) The woman he loved betrayed John

(50) # The woman they loved betrayed some men.

(51) Its chemical formula defines water

(52) # Because of its bad condition John threw away some furniture.

(# Indicates impossible on the "coindexed" reading)

This is a piece of evidence that Carlson does not use to identify kind-level Nps. And Indeed this seems to be the case as shown (53) – (54).

(53) Mary chased them, because racoons stole her sweet corn.

(54) # Mary chased them, because some racoons stole her sweet corn.

The name like properties of bare plurals and mass nouns follow simply from their being nominalizations of CNS, and a complex range of distributional characteristics of NPs can be make sense of. To the extent that the present approach works better than preceding ones, this will constitute an indirect argument for having a semantics that has the relevant features of IL*

2.7 LINK (1983)

According to Link (1983) the weekly Magazine of the German newspaper Frankfurter Allgemeine Zeitung regularly issues Marcel Proust's famous questionnaire which is

answered each time by a different personality of West German public life.

(1) "that they are few."

The phrase (1) predicates something collectively of a group pf objects, here: Augstein's friend's. As it is well known, collective prediction is a rather pervasive phenomenon in natural language, as the following sample of sentences shows:

(2) The children built the raft.

(3) The Romans built the bridge.

(4) Tom, Dick, and Harry carried the piano upstairs.

(5) The playing cards are scattered all over the floor.

(6) The members of the committee will come together today.

(7) Mary and Sue are room-mates.

(8) The girls hated each other.

There is a striking similarity between collective predication and prediction involving mass nouns.

(9) (a) The children gather around their teacher
     (b) The water gathers in big pools

According to (Link) a characteristics feature of mass terms, their cumulative reference property, can be imitated by plurals.

(10) (a) If **a** is water and **b** is water then the sum of **a** and **b** is water.
      (b) If the animals in this camp are horses, and the animals in that camp are horses, then the animals in both camps are horses.

All this has been observed and discussed in the literature although the noted parallelism has perhaps not been stressed too much.

As it can be seen from Pelletier's 1979 volume, however, there is much disagreement about the proper way of attacking the logical problems posed by plurals and mass

terms. From a semantic point of view the basic question is: What do mass terms and plural expressions denote? Some have thought that in order to be able to give a satisfactory answer to this question it is necessary to give up or at last extend the underlying set theory and to define new kinds of objects, for instances ensembles (Bunt 1979) or kollektionen (Blau 1979).

In the case of group and mass objects this picture naturally leads to the notion of lattice structure, an idea which is, again not new: it is inherent in mereological predicate logic and the Calculus of individuals as developed by Leonard/Goodman 1940 and Goodman/Quine 1947.

Our guide in ontological matters has to be language itself, it seems to me. Its semantic counterpart in the theory to be presented below, the "materialization" function, lies at the heart of my reconstruction of the ontology of plurals and mass terms: individuals are created by linguistic expressions involving different structures even if the portion of matter making them up is the same. Consider the example from Blau 1979 (imagine that there is a deck of playing cards on the table).

(11)   (a) the cards
         (b) the deck of cards

In general, however, the introduction of a collective term like (11b) is indicative of connotations being added enough for it to refer to a different individual, for instance, a committee is not just the collection of its members, etc. There might be two different committees which necessarily consist of exactly the same members.

It might be thought, then, that collective predication is just the context in which pairs of expressions like (11a) refer to collections and thus are co referential. Then the two following sentences do not mean the same although number consecutively is a collective predicate.

(12)   (a) The cards on the table are numbered consecutively

          (b) The decks of cards on the table are numbered consecutively

By contrast, spatio-temporal collective predicates do refer to the pure collection, or, as he conceive it, the portion of matter making up the individual in question. So the following (a) sentences are indeed equivalent to their corresponding) sentences.

(13)   (a) The cards are on the table

          (b) The decks of cards are on the table

(14)   (a) The stars that presently make up the Pleiades galactic cluster occupy an area that measures 700 cubic light years

          (b) The Pleiades galactic cluster occupies an area etc.

In the following (Link) will distinguish between pure plural individuals involved in (12) and collections in the portions of matter sense referred to in (13) and (14).

By contrast, collections do not, they typically merge those levels. Sums and collections are similar, however in that they both are just individuals, as concrete as the individuals which serve to define them, and of the same logical type as these. The latter feature is important because there is no systematic type ambiguity inherent in predicates like carry, build, demolish, defend etc. Inherent in the notions of a set is atomicity which is not present in the linguistic behaviour of massterms.

Typical examples are stuff names like gold in sentences like gold has the atomic number 79. It seems to refer to the concrete "scattered individual" that you just find everywhere, hence Quine's analysis in terms of mereology. In this sense the sentence should by synonymous to the water is widespread.

So there can be no doubt that some notion of fusion is needed to account for definite description involving predicative mass term. Substances are abstract entities and cannot be defined in terms of their concrete manifestations. The question, then, is of

what kind the connections are that are intuitively felt between substances and their quantities.

Now what Link is going to propose, then, is basically the following. First of all, let us take seriously the morphological change in pluralization, which is present in many natural languages, and introduce an operator, *, working on 1-place predicates P, which generates all the individual sums of members of the extensions of P.

The set **A** of atoms of **E** consists of the "singular objects", like this card, that deck of cards, etc. Sums are partially ordered through the intrinsic ordering relation '<' on E which is expressed in the object language by the 2 – place predicate '//'.

There is a second ordering relation, called the material part (M-part) relation and denoted by "T". It establishes a partial order on portions of matter, but only a precorder, called <m, on the whole domain of individuals. Objects which are m-parts of one another are materially equivalent in that they have the same portion of matter constituting them.

If **a** is an i–part of **b** then **a** is a m-part of **b**, symbolically: (19) a Tlb-aTb. In order to explain the meaning of 'T' more precisely let me supply the remaining concepts of the model structure to be defined below. One-place predicates are interpreted as subsets of E\ {O}. If **P** is a predicate we can introduce its mass term correspondent, called MP; if II P II is the extension of p in a model, define (23) // mp //: = { x ED/ x< sum [// p //]}

This inference can be formally represented if we consider pop star as a distributive predicate P in the sense of (27).

For non-distributive predicates we have, of course, no such result, witness carry: a or b might be in the extension of carry while **a** or **b** alone is not.

Distributive predicates working on plural terms have to be starred, all the other

predicates must note be. Link conclude the informal part of the paper with some more formalizations of natural language sentences involving plurals and mass terms. Most of the principles governing their logic that have been mentioned in the literature come out valid in the system LPM below.

(33) A child built the raft.

(34) Children built the raft.

(35) The child built the raft.

(36) The children built the raft.

(37) Every children built the raft.

II The logic of plurals and mass terms (LPM)

LPM is a first order predicate calculus with the usual logical constants '7,' 'v''n' –' – ; 'v' 'n'

The set of 1-place predicate constants contains two specified subclasses: the set MT of predicative mass terms and the set DP of distributive predicates MT and DP are taken to be disjoint sets.

Link introduce a number of defined expressions.

(1) General first order abbreviations

Let P,Q be-1-place predicates, R a2-place predicate and a an individual term.

(D.1) PcQ – A x (px – qx)

(2) Defined predicate constants. With two individual terms a, b let a=b stand   for" "a equals b," a – b for "a is m –equivalent to b".

(3) Defined predicate operators.

The proper plural predicate * p of p and the mass term correspondent to p, mp, are them defined as follows.

(D.12) * Pa - * Pa ^7 Ata

5. Special abbreviative formulars. Let P be a 1-place predicate.

(D19) Dristr (P) – n – (Px – Atx)

In the following definition of a model for LPM

Link is going to interpret only 1-place predicates for simplicity (expcept for the special 2-place predicate constants.

All the other many – place predicates receive their usual first order interpretation.

The model is such that predicates are interpreted in the non-zero elements of E (condition (ii). Conditions(iii),(iv) garantee the special properties of the distributive and mass predicates, respectively (v) and (vi) are designed to validate the meaning postulates (Mp.1) and (MP.2) above, respectively

Application to Montague grammar

Let the basic syntax be as in PTQ. The category CN of common noun phrases has to be subcategorised into MCN (mass noun phrases) SCN (singular count noun phrases), and PCN (plural count noun phrases).

Most of the basic count nouns like child are taken as distribute, similarly iv phrases like die or see.

In accordance to what Link did above

the translation rule T4 involving distributive expressions has to be such that their translations always enter this rule under the star operator.

Finally, 9 – 11. show that universal quantification

Is as in LPM where, again, the difference in meaning between the children and all the children is only partly characterized.

5. a child

   some child

   some water

6. (some) children

   the child

(8) The children.

(9) All the children.

(10) Every child

(11) All water

The final topic he wants to say something about is the vexing problem of relative clauses with more than one head noun:7

First of all, there is a rather friendly type of hydra, like the following

(67) The German or Austrian John met yesterday.

(68) The cabinet member and Mafioso who was deeply involved in the scandal

Next, let us conjoin two singular count nouns to form a plural phrase. Examples are man and woman, boy and girl, husband and wife, landlord and tenant. With this sentences like John and Mary are husband and wife can be handled in a first approximation while the non – symmetric features of this sentence have to be taken care of by other clues.

This is because the predicate (69), by itself is necessarily symmetric reflecting the fact that pluralization has the force of group formation which typically gives rise to symmetric construction 19. Such is the following CN phrase.

(70) boy and girl who dated each other.

What is needed here is some notion or ordered pair in the object language, a part from the symmetrical sum operator.

The last type of hydra Link wants to address

myself to shows up in a sentence like the following (75) all of students and some of the professors who had met in secret were arrested after the coup d'etal.

From a purely syntactic point of view it might look natural to try a T-S analysis here: first

conjoin the two unrelativized terms all the students and some of the professors and then modify the conjunction by the relative clause.

We already have a clear understanding of the meaning of the plural CN phrase students and professors who had met in secret which is expressed by the 1-term of (73).

Link summarize what he consider to be the Virtues of the present approach to plural and mass terms.

(1) The logic of plurals and the logic of mass terms share a common lattice structure the only difference being that the former leads to an atomic structure while the latter does not.

(2) By means of the star of pluralization and term formation involving plural constructions can be treated compositionally.

(3) Plurals terms (the cards) and collective terms (the deck of cards) are equivalent in that they are interchangeable in invariant context, this does not make them coreferential, however, in contrast to systems of the reduction ist not.

(4) Collective predication becomes possible in a unified way accounting for the fact that may predicates (e.g carry) are not marked with respect to distributivity and can,therefore have mixed extensions.

2.8. Eschenbach (1993)

Eschenbach states that in the last two decades the question of how plural can be represented in a logical framework has been widely discussed. The discussion mainly focussed on what the structure looks like and how the difference between distributive and collective sentences should be represented, little has been about how the singular plural distinction of nouns should be treated.

This question will be tackled in the present article, based on the assumption of a structured model theorectic universe which is presented in section 5. Although this intuitions seems to be shared by other researchers working in this field, the methods they employ in their analysis are more complex and sometimes fail to meet it.

In the study of semantic phenomena connected to number, it is quite common to stipulate determiners like the, which allow for combination with both singular and plural nouns, to be ambiguous even if they do not exhibit any difference in form in the different contexts. Such treatment is exemplified in the discussion of the approach due to Krifka (1989a) in section 7.

In contrast to this, the approach presented here gives a sound basis for a uniform analysis of such determiners as will be shown in sections 9 to 11. Link (1986) studies how to deal with structure domains in the framework of the generalized quantifier theory (Barwise and Cooper 1981)

In the first two sections Corolla describe two ways of classifying nouns with respect to type differences (predicative Vs. relational nouns and structural differences (count, mass, and group nouns). While the second classification is often dealt with in theories on the plural, the first one has not been considered in this area.

2.8.1 Type – dependent noun classification: Predicative and relational nouns

According to Eschenbach (1993) nouns are always assumed to correspond to unary predicates and the class of nouns that is better represented by relations between objects is not discussed.

Many nouns which are derived from verbs (destruction, visit,owner), as well as nouns which express relations between people (mother, brother,aunt chief) nouns like king, capital, beginning, end , link, relation and member, are relations nouns.

In order to distinguish the two argument places, she will refer to one as the 'referential argument place' and to the other one as the 'internal argument place' (cf. Bierwisch1989).

The internal argument can be explicity specified by several possessive constructions, syntactically occurring as specifier or modifier (John's mother my brother, the destruction of the city, Germany der vater dres Jungen). Or in special cases by other prepositional phrases (the relation between John and Mary, German: die Eintrittskarte fir das konzert).

In additional to the cases of pure predicative nouns and pure relational nouns, there are many nouns which cannot be classified out of context within this dichotomy. Nouns such as child and picture can occur in both uses.

Relational nouns have not been studied in the plural discussion, and even if they appear in examples, their semantic type is ignored.

The differences in the referential behaviour of predicative and relational nouns with respect to number can be seen in examples (1) –.(3).

The class of relational nouns can be split into two subclasses, one containing nouns which specify anti-symmetric relations (2), while the other holds those nouns which allow for symmetric interpretations.

(1) Predicative nouns (boy, circle, square, group)

  (a) The girl entered the room.
      A girl entered the room.
  (b) The girls entered the room.
      Four girls entered the room.
(2) Relational antisymmetric nouns (refree…member, teacher, side…)

(a) The daughter entered the room.

A daughter entered the room

(b) The daughters entered the room.

Four daughter entered the room.

(3) Relational non-antisymmetric nouns (partner apponet, relative.....)

(a) The sister entered the room.

A sister entered the room.

(b) The sister entered the room.

Four sisters entered the room.

The relevant noun phrases in (1) give information about age and sex of the referents., while the noun phrases in (2) give information about their sex and specify that they stand in a special relation to some person not mentioned in the sentences.

To interpret these sentences property, we need contextual information about at least one of their parents; that is, the context has to specify those daughter(s) is talked about.

In (4), the information needed to interpret (2) (3a), and the non-reciprocal reading of (3b) property is given explicitly.

(4) (a) Karin's daughter entered the room.

(b) Michael's daughter entered the room.

(c) Ina's sister entered the room.

(d) Oliver's sisters entered the room.

The crucial point illustrated by these examples is that it is not necessary to specify an argument of the plural relational noun if it occurs reciprocally as in (3b). The reciprocal use of relational nouns is possible for all relational nouns that do not exclude symmetric

constellations.

2.8.2 Structure-dependent noun classification: mass-count, and group nouns.

The distinction between mass nouns and count nouns has traditional in philosophy and semantics (cf. Strawson 1959; Quine 1960; Link 1983, Bunt 1985, Krifka 1989; Pelletier 1979;Pelletier and Schubert 1989,and literature given there.

Typical mass nouns are water, gold, sugar, while man, car, event are typical cases of count nouns. The nouns of these classes are said to exhibit different behaviour in morphology, syntax and semantics. A morphological distinction between mass nouns and count nouns is that mass nouns do not allow for both a singular and plural form.

Many mass nouns in English and German are singularia tantum i.e. do not allow for pluralization.

Syntactically, mass nouns co-occur with much, little, and unstressed **some**, while count nouns have numerals, a(n),each, every, many, several few, and stressed some as determiners.

In contrast to singular count nouns, mass nouns and plural predicative count nouns have the property of cumulative reference (cf. Quine 1960. Link 1983)
According to Allen (1980), these classes are not as clear cut as they seem to be. The various criteria for the count-mass distinction will yield different divisions of the class of nouns.

Pelletier and Schubert (1989) give an elaborate discussion of which linguistic level (syntax, semantics, or pragmatics) is sensitive to the mass-count distinction, and whether this is a distinction between nouns, noun occurrences, or full noun phrases.

A noun that can occur in mass contexts as well as in count contexts is usually

interpreted differently in the different contexts. In order to handle this in the semantic representation, one could describe the difference between mass and count readings by applying operations to the basic noun representations, yielding proper count or mass nouns.

In the discussions of the semantics of number Eschenbach will mainly concentrate on count noun occurrences and describe the difference between their singular and plural forms.

The second distinction between nouns in the discussion of plural is the distinction between nouns denoting simple individuals (boy, circle, thing and nouns denoting groups (group, family, committee, couple), which are traditionally included in the set of collective nouns.

The class of group nouns is interesting in the discussion of number because some predicates are only applicable to plural phrases and to singular group-denoting noun phrases, but not to singular individual-denoting noun phrases.

(5) (a) The girls meet .
    (b) The girl meets.
    (c) The group meets.

This distinction is mainly a semantics one.

In the literature on plural, the main question discussed with respect to this distinction is whether the group and the members of the group should or can have the same denotation.

2.8.3 Syntactic VS. Semantic number

Number is a syntactic feature which is subject to agreement between various parts of a phrase or a sentence. The extant to which this agreement takes place differs from

language to language.

Eschenbach will analyse number on the semantic level as a feature of noun phrases and consider the agreement occurrence of number interms such as verbs as a purely syntactic features, even if the number of the noun phrase is obvious only from its agreement behaviour. The only approach which interprets singular form of a noun is assumed to correspond to the semantic core of the noun, to which the plural operator can be applied. Connected to the analysis of the feature singular is the question as to whether their singular form of mass nouns and count nouns should be analysed in the same way.

Krifka (1989a) assumes mass nouns to be transnumeral, i.e. the feature singular is not interpreted at all. Eschenbach will assume that we have three semantic number categories: mass, (count-) singular, and plural and that the syntactic feature singular is (at least in German and English) ambiguous between mass and (count-) singular. The next problem to be regarded here is whether the number of a noun occurrence is a consequence of agreement with another constituent of the noun phrase.

This question was raised by Verkuy (1981) and Krifka (1989a) in the context of numeral constructions as three apples and 1:0 apples. They assume that the choice of the plural form of the noun is a consequence of agreement between the numeral and the noun.

While the approaches of Verkuy, and Krifka depend upon their treatment of number in the context of numerals, the approach presented in this paper is basically independent of whether number is interpreted in the context of the items mentioned. Several approaches assume determiners that can be combined with singular and plural nouns as being ambiguous.

In contrast to this, Eschenbach will give representation of determiners which meet the following requirements:
- A determiner which does not restrict the number of the noun is given a uniform representation which combines with the result of applying the number operator to the

core noun meaning.

- A determine which restrict the number of the noun (as a (n) and both) is applied to the core noun meaning.

Another problem arises with question and negations. It has often been notice that question like (7a) cannot honestly be answered in the negative if the addressee has only eaten on apple or parts of one apple

(7) (a) Did you eat apple?
     (b) John did not invite girls to his party.
     (c) John ate no apples.

As a consequence, Krifka and Lonning do not analyse plural strictly: the denotations of plural nouns are allowed to include atomic objects.

2.8.4 The formal language and the structure of the universe

Before entering an analysis of Link's representation of plural nouns, Eschenbach will give a short presentation of the formal framework for the discussion of plural noun phrases. As usual in formal semantics, she will have a formal language named 'Logic of plural nouns (LPN) as an intermediate level between natural language and the denotation level. LPN is based on first-order predicate logic with equality, abstraction, and a proper treatment of, - descriptions.

In the model-theoretic part, which yields the semantics for LPN, She assume a structured domain of references. This set is meant to hold the denotations of singular count noun phrases. It corresponds to the domain of references in standard approaches of model-theoretic semantics which are not concerned with number or the count-mass distinction. The only important thing to notice is that we do not force mass-entities to be built up from atoms in D.

The operation is assumed not to be sensitive with respect to the mass-count distinction in order to allow objects 1) which are neither proper masses nor countable objects. The inclusion of the subset A of D is due to the assumption of an objective antomicity criterion i.e. a criterior that judges which objects are atomic individuals, and which are not. But as long as we apply this function to non-empty finite subsets of D, we will always get a well – defined result.

This allows a uniform treatment of mass nouns and count nouns (Link1983). Nouns which allow for both occurrences may have elements of M and C in their denotation (cf. Link 1983, Pelletier and Schubert 1989). The structures presented for the plural interpretation are similar enough to the structure Link introduced in Link (1983) to discuss his suggestion for the meaning of plural with respect to nouns on this basis.

2.8.5   Semantics of number: Link

There are essentially two different approaches to the semantic representation of plural based on a lattice – structure universe.
The first one is presented by Link (1983) and will be described in this section.
The second approach is given by Krifka (1989) and will be outlined in the next section.

Link's basic assumption is that the core meaning of a count noun is given by the meaning of the singular form of that noun. As a consequence, there is no operator in his logic which corresponds to the meaning of singular. He defines two operators applicable to such predicates called 'the plural operators' (.) and 'the proper plural operator'(*). The plural operators are only defined on unary predicates.

The different between (9d) and (9e) is not syntactic or semantic but due to world knowledge. The semantic representation of these sentences should allow both interpretations.
(a) Son of Peter.
(b) Sons of John.
(c) Sons of Peter and Ann.

(d) Sons of John and Mary.

(e) Sons of John and Peter.

As stated above, Link assumes that the basic meaning of the nouns is only defined on atomic objects. This restriction is meant to reflect the distributive nature of predicative nouns: each of some boys is a boy. This operator is not justified by syntactical or morphological feature in natural language.

However, there are still some relational nouns to be considered which behave differently from son and the others mentioned above. Thus, ownership might be ascribed to a collection of people, from which the relation between one of them and the properly is derived.

(14) (a) George is a member of the committee.

(b) George is one of the members of the committee.

(15) (a) George is one of the owners of this house.

(b) George is one of the owners of this house.

The nouns owner, like inventor, author, and murderer, might in its plural form behave collectively with respect to the referential argument place.

The integration of relational nouns is also serious challenge to the approach of Verkuyl (1981). To get the full paradigm of possible plural noun uses, we would in both frameworks have to assume an additional operator to get the reciprocal reading of (3b). This can be formulated as (16).

(3) b. The Sisters entered the room.

Four Sisters entered the room.

Thus it appears that Link's plural operators are not the representation of the morphological feature plural.

2.8.6 Semantics of number: Krifka

Krifka (1989a) assumes that the meaning of a count noun should be represented by a complex structure that is based on the core meaning of the noun which does not depend on number.

The difference between mass nouns and count nouns is reflected in Krifka's approach by a difference in type. While a mass noun is represented by a unary predicate on mass a count noun is noun is mapped to a more complex structure: a relation between individual and relationals.

Krifka (1989a) specifies the semantic plural operator as depicted in (18),10 and girls is represented as in (19). So this approach seems to explain why only singular count nouns cannot appear as bare forms in German and English.

Krifka does not introduce as a semantic operator to represent singular singular. In a way krifka assumes that the difference between singular and plural should be represented by a difference in type.

Krifka cannot assumes that the plural-operator he specifies corresponds to the plural morpheme of the noun. According to (19) its seems reasonable to assume the representation (22) as the lexical entry for leute.

Krifka has to assume that there is a number-independent represantation of Leute in the lexicon whose singular form is not realised in German. According to this, krifka assumes that the plural mopheme has no meaning at all and associates the plural operator with the determiners which trigger plural agreement.

2.8.7 An alternative approach to the semantics of number

Although Link and Krifka introduced a structure set as the domain of reference, their analysis of number is not directly based on the embedding of the referents in this

domain, but on predicates with different behaviour with respect to it. The analysis that Eschenbach present here is based purely on the embedding of the referent of the noun phrase into the domain of reference.

Krifka (1989a) suggested that verbs should be anylysed in a corresponding way.
As for problem of Link's and Krifka 's approach to the semantic of plural, it is obvious that the main role of number is to specify the complexity of the referential argument of the noun.

Thus the semantic core of number should be given by a unary predicate as in
*(25) Count plural: complexity
        Count singular: at

Anti-symetric relations are excluded because they do not allow for a proper clique. The reciprocal use of relational nouns is restricted to complex objects.

Though some languages have a more elaborate number system.
The approaches of Verkuyl, Krifka, and Link do not provide a basis for explaining the number feature of verbs.

(31) (a) John and Mary walk home. Tea and coffee is in the kitchen.
      (b) The committee are old. The committee is old.
      (c) Eine Mange

As a consequence, it does not matter whether we assume that a number feature which occurs as a consequence of agreement is represented or not: representing it semantically yield redundancy, but no conflict.

2.8.8 The meaning of the definite article

Some natural language determiners can occur in front of both mass nouns and count nouns. Lobner described the behaviour of the definite article as quantificational

determiners. "The children refers to the entire object to which children applies the child to the entire object to which child applies (which is necessarily only one child): and the snow to the entire object to which snow applies."

Link (1983,1991) assumes four different semantic operators to represent the definite article: singular (t), plural (o), proper plural(o*), and mass (u)

In the link (1991) he defined I and o* as restrictions o. There are mainly two problems with this analysis.

The function sum allows for sum(s) $ s.

The second problem with this analysis is that the plural definite article is not applied to one predicates *p or *p, but to the singular predicate p. Regarding the closure properties of noun denotations as described above, the most natural way to get the 'entire object' interpretation relative to a predicate in a semi-lattice structure is to use the maximum function relative.

2.8.9 Indefinites and numerals

In English (and German), indefinites can appear as bare as in (32,b), or a with determiner from a certain class, which includes the indefinite articles a(n) and some (32.cf), minerals (32g,h) and a few more.

(34) (a) Mary puts water into the soap.
   (b) Bill likes books.
   (c) John owns a donkey.
   (d) Some man entered the pub
   (e) Mary put some water into the soap
   (f) Some book belong to me.
   (g) One book belongs to me .
   (h) Three boys entered the pub.

It has been widely recognized that only singular count nouns allow the indefinite

singular article while plural count nouns and singular mass nouns allow for bare forms.

Krifka's suggestions on the meaning of count nouns give an explanation for this difference but get into difficulties with all unspecific determines, as Eschenbach showed above.

Because the indefinite article a(n) only allows singular nouns, Eschenbach assume that the singular feature of the noun in this context is due to agreement with the article and not interpreted.

If we assumed that the effect of bare forms is semantically determined, we would have to assume that there is an empty determiner with special semantic effects as in (36).

CHAPTER 3

MASS NOUNS AND NOMINAL CLASSES

3.1 AIMS

The aim of this section is to establish which nouns may be mass nouns in Tshivenda. For this purpose the classification of nouns in WordNet will be considered. After this, each nominal class will be investigated to see whether there are any mass nouns in these classes. The specific mass nouns in each nominal class will then be investigated to see whether they have certain morphological and syntactic features which are different from count nouns.

3.2 NOUNS IN WORDNET

According to Miller Wordnet contains almost 80,00 noun word forms organized into some 60,000 lexicalized concepts. Many of these nouns are collocations, a few are artificial collocations invented for the convenience of categorization.

WordNet's goals differ little from those of a good standard college – level dictionary, and the semantics of WordNet is based on the notion of word sense that lexicographers have traditionally used in writing dictionaries.

WordNet is not a conventional dictionary that has been made readable by a computer, although it contains much of the same in formation that is found in the entries of machine readable dictionaries. The lexical entries of a conventional dictionary contain spelling, pronunciation, inflected and derivative forms, entymology, part of speech, definitions and illustrative uses of the alternative senses, synonyms and antonyms, special usage notes, occasional line drawings or plates – a good dictionary is a remarkable store of information.

According to Miler (1990) WordNet does not give pronunciation, derivative morphology, etymology usage notes, or pictoral illustrations.

WordNet does, however, try to make the semantic relations between word senses more explicit and easier to use.

The basic semantic relation in WordNet is synonymy

WordNet does not entail interchangeability in all contexts, by that criterion, natural languages have few synonyms. A synset is eassentially what Spark Jones (1964 and 1986) call a 'run' which is the basic element in her theory of semantic classifications. According to Miller (1990) WordNet, on the other hand, synsets is very different. In WordNet, for example, it happens to be the case that there is no path connecting the synset (short, pellet with the synset (shot, injection).

Most synsets are accompanied by the kind of explanatory gloss that is provided in conventional dictionaries. In particular, dictionary entries for polysemous words (words that can be used to express more than one meaning) have several different glosses, whereas a synset has only a single gloss.

Although synonymy is a semantic relation between word forms, the semantic relation that is most important in organizing nouns is a relation between lexicalised concepts.

3.2.1 Lexical Hirarchy

Information about hyponymic relation between nouns is given in the definitional phrases of conventional dictionaries, Amsler (1980). A conventional dictionary might define this sense by some such phrase as a 'migratory bird that has a clear melodious song and a reddish breast with gray or black upper plumage.'

It consists of a hypernymy or genus term (bird in this example, preceded by adjectives or followed by relative clauses that describe how this instance differs from all other instances of that hypernymy.

Hypernymy is a relation between particular senses of words. Thus, a lexical hierarchy can be reconstructed by following the trail of hypernymically related synsets: [robin, redbreast) @ (bird) @ – (animal) animate being) @ – (organism, life-form, living thing), for example, where the brackets indicate a synset and a – is the transitive, a symmetric, semantic relation that can be read is '@' or 'is' a – kind of.'

A valuable consequence of representing hypernymy in this manner is that for early hypernymic relation we can add a corresponding hyponymic relation that points in the opposite direction. When the WordNet scorce files are converted automatically into a lexical database, one step in this process is to insert inverse pointers for the specialization relation. In WordNet, therefore, moving toward more specific terms is as easy as moving towards more generic terms.

According to Sowa (1991) hierarchies of this sort are widely used by computer scientist as a means of representing knowledge. Computer scientists call such hierarchies inheritance systems, because they think of specific items inheriting information from their generic superordinates.

The nouns in WordNet form a lexical inheritance system, a systematic effort has been made to connect hyponyms with their hypernyms. According to Spark Jones (1986) WordNet assumes that a distinction can always be drawn between synonymy and hyponymy.

In WordNet, therefore, an effort has been made to avoid cases where a noun is its own hyponym; it is not made explicit that board is frequently used to refer to specific kinds of boards (surfboards, skateboards, chessboards, etc.).

WordNet presupposes a linguistic knowledge of anaphoric relations; for example, an anaphor can be a hypernym of its antecedent, as in 'I though it was a robin but the bird flew away before I could get close enough to be sure'.

3.2.2 Unique beginners

One way to construe the hierarchical principle is to assume that all nouns are contained in a single hierarchy. The lexical justification is tenuous, however, because these abstract generic concepts carry so little semantic information, it is doubtful that people could agree on appropriate words to express them.

According to Miller (1991) WordNet divides the nouns into several hierarchies, each with a different unique beginner. The problem of course, is to decide what the primitive semantic components should be. The lexical source files in WordNet use the set of 25 unique beginners that are listed in Table 1.1. These hierarchies vary widely in size and are not mutually exclusive – some cross – referencing is required – but on the whole they cover distinct conceptual and lexical domains.

List of 25 unique beginners for noun source files

(act, activity)	(food)	(possession)
(animal, fauna)	(group, grouping)	(process)
(artifact)	(location)	(quantity, amount
(attribute)	(motivation, motive	(amount)
(body)	(natural object)	(relation)
(cognition, knowledge	(natural phenomenon)	(shape)
(event, happening)	(person, human being)	(state)
		substances
felling, emotion)	(plant, flora)	(time)

Once these 25 unique beginners had been chosen however, some natural groupings among them become apparent. It is of interest that the 25 lexical source files are relatively shallow, that is to say, seem to have a limited number of levels of specialization. Lexical inheritance systems, however, seldom go more than 10 or 12 levels deep, and the deepest examples usually contain technical distinctions that are not part of the everyday vocabulary.

3.2.3 Some psycholinguistic assumptions

Athough the general structure of noun hierarchies is generated by the hyponymy/hypenymy relations it is not obvious how this knowledge is represented in a person's lexical memory. According to Miller (1991) in order to make all of this information available when (robin) is activated, it must be possible to associate (robin) appropriately with at least three different kinds of distinguishing features.

- Attribute: is redbreasted, (warm-blooded, vertebrate).
- Parts: has (beak, feathers, wings); and
- Functions: sings, flies(lays eggs), Although each kind of distinguishing feature should be treated differently (e.g. attributes are adjectives, parts are nouns, functions are verbs), most cognitive theories of how this knowledge is represented treat all features the same way.

Although most lexicographers and computer scientists find lexical hierarchies to be a natural way to represent the organization of nominal meanings, many cognitive scientists have expressed serious doubts about it. In 1969 Collins and Quillian reported that the time required to verify the statement 'A robin is a bird' is shorter than the time required to verify, "A robin is an animal'

The objections were carefully summarized in 1981 by Smith and Medin, who referred to the featural explanation of hyponymy as the 'classical view'. Studies in which people are asked to rate typicality (Rips, Shoben, and Smith 1973, Rosch 1973), show that people agree consistenly about typical instances and that the ratings have little to do with frequency or familiarity.

Prototypically theory need not be limited to a single exemplar. But the hierarchical structure of the noun lexicon seems to fit linguistic facts despite the lack of a good explanation. But such a prohibition could work only if the grammatical rule could apply to lexical hierarchies generally and if the hyponym-hypernymy relation were immediately

available to the linguistic processor.

Because it is lexical knowledge that a novel is a book the anaphoric coreference is acceptable. There is apparently a linguistic convention that accepts anaphoric nouns that are hypernymy of the antecedent.

So the hierachical organization of nominal concepts appears to be a necessary feature of the mental dictionary.

In addition to the associations between words that are interchangeable in a context, the mental dictionary includes associations between words that frequently occur together.

In terms popular in the 1950s and 1960s, WordNet provides a good account of paradigmatic association but contains almost nothing about syntagmatic associations. According to Miller (1993) to put the matter differently, WordNet suffers from what Roger Chaffin has called the "tennis problem."

Nouns that co-occur in discussions of tennis are scattered around WordNet with nothing to pull them together. If we knew how to add to each noun a distinctive representation of the contexts in which it is used, Miller and Charles (1991), WordNet would be much more useful.

The organization of WordNet is provided by pointers that represent semantic relations not by lists of features. Nouns in WordNet consist of synsets that are organized into hierarchies by pointers representing hyponymy and hypernymy . In WordNet, featural information does not define hyponymy or contribute to the noun hierarchy in any explicit way.

3.2.4 Some things not in WordNet

Various kinds of information that are available in a person's mental dictionary are not available in WordNet.

A more serious problem, however, is that @ – actually represent more than one semantic relation.

There are three possibilities for dealing with this situation.

1. The most frequent cake is to let @ – represent both formal and telic relations at the some times. For example, in the case of (poker) @ – (fire, iron) both form and function are represented.

2. Another possibility is to point to more than one hypernymy. For example   (written, agreement) a (legal document) represents a formal relation and written   – agreement)@ – (agreement) represents a telic relation.

3. Finally, sometimes the hyponym can be spirit into two different synsets,   one with a formal hypernymy and other with a telic hypenymy. For example,   (chicken) @ – (bird) is formal and (chicken) @ – (food) is telic.

WordNet draws no explicit distinctions between proper and common nouns, or between mass and count nouns.
Moreover, WordNet does not attempt to identify what have been called "basic-level" categories or "generic" concepts (Berlin, Breedlove, and Raven 1966, 1973). Rosch (1975), Rosch et al, 1976) extended and elaborated this generalization; for concepts at the basic level, which is usually somewhere in the middle of the lexical hierarchy, people can list many distinguishing features.

These observations have been made largely for the names of concrete, tangible objects, but some cognitive scientists have argued that a basic or primary level should be a feature of every lexical hierarchy (Hoffmann and Ziessler 1983: Lakoff 1987).

Some claims have been made that the basic level is where the parts of something can be specified, which might explain why tests of this hypothesis have been concerned primarily with words denoting physical objects.

Finally, there are not enough different semantic relations in WordNet

As WordNet grew and finer distinctions were required, it became obvious that we had not included enough different kinds of semantic relations to characterize all of the differentiae that are needed.

3.2.5 Parts and meronymy

In addition to the formal and telic roles of nouns, Pustejousky (1991) proposes what he calls a "constitutive" role, which deals with the relation between an object and its constituents or proper parts.

The part – whole relation between nouns is generally considered to be a semantic relation, called meronymy (from the Greek meros "part"), Cruse (1986), comparable to synonymy, antonymy, and hyponymy.

In WordNet meronymy is found primarily in the noun body, noun, artifact, and noun quantity files. Meronymy is often compared to hyponymy: both are asymmetric and transitive, and both can relate terms hierarchically.
Since meronyms are distinguishing features that hyponyms can inherit, meronymy and hyponymy become intertwined in complex ways. The relations between meronymy and hyponymy are further complicated by the fact that parts are hyponyms as well as meronyms.

According to Miller (1990) in WordNet a special synset was created for the intermediate concept, (wheeled vehicle).

Winston, Chaffin, and Hermann (1987) take such failures of transitivity to indicate that

different part – whole relations are involved in the two cases.

3.2.6 Antonymy

According to Deese (1965) the strongest psycholinguistic indication that two words are antonyms is that each is given on a word association test as the most common response to the other. Such oppositions are most common for deadjectival nouns: the nouns happiness and unhappiness are antonyms because they derive from the antonymous adjectives, happy and unhappy.

According to Miller (1990) semantic opposition is not a fundamental organizing relation between nouns, but it does exist and so merits its own representation in WordNet.

Perhaps the most interesting observation about antonymous nouns is that noun antonyms nearly always have the same hypernym, often the same immediate hypernym.

3.2.7 Attributes and modification

According to Miller (1990) values of attributes are expressed by adjectives. For example, size and colour are attributes of robins: the size of robins might be described by the adjective 'small', and the colour associated with robins can be described by adjective 'red'.

According to Miller (1990) the value of the attribute size when applied to robins is small, the value of the attribute colour when applied to robins is red. Although we have not undertaken the project it should be possible to collect a large corpus of adjective noun pairs and, using the adjective attribute connections encoded in WordNet, induce the important attributes of various nouns.

When adjectival modification plays a major role in WordNet is in the formation of collocations or compounds that differentiate lexical concepts that are more specific than the basic level.

3.2.8 Similar meanings of polysemous nouns

In most dictionaries similar meanings of a polysemous word, or meanings that have similar etymologies, are grouped together. The interface to WordNet 1.5 orders the meanings of polysemous nouns according to their relative frequencies of occurrence in the passages that have been semantically tagged.

In this situation, Philip N. John – Laid (personal communication) proposed a principle way to group similar meanings.

The task, then is to identify nodes holding similarity relations as high up in the noun hierarchy as possible. The assumption is that if two identical strings share the same hypernym, then their meanings are similar. The second basis for grouping, the twins, is based on the assumption that if two synsets share the same word forms, then their senses are similar. In WordNet 1.5, cousin relations for over 100 node pairs have been indentified.

Conclusion

According to Miller (1991) it was suggested that WordNet is based on psycholinguistic principle in the same sense that the Oxford English Dictionary is based on historical principles.

The fact is that WordNet has been largely ignored by psycholinguistics, computational linguistics have found it far more interesting.

WordNet is organized conceptually, not alphabetically and its realization as a computer database resembles a dynamic system more closely than does a printed book.

Psycholinguists, however, do not regard these features of WordNet as principles that

can used to explain the psychological bases of human language. Computational linguists, on the other hand, see WordNet as a promising component of systems that will be able to process language in useful ways, perhaps even to understand it.

Development of the nouns in WordNet has therefore been driven a more by potential applications to computational linguists than by advances in theories of cognitive psychology.

3.3 NOMINAL CLASSES IN TSHIVENDA.

The following nominal classes may be established for Tshivenda.

3.3.1 Natural phenomena

Natural phenomena in this context refer to objects and occurrences that form part of nature or are resultant from it.

Mavu (soil)

3.3.2 Natural objects

Nature objects are those objects produced by nature.

Tombo (stone)

3.3.3 Artefact

Artefacts are products of human workmanship.

Lufhanga (nife)

3.3.4 Food

Food can be regarded as the things that are eaten by people and animals, or used by plants so that they can live and grow.

Vhutete (porridge of fine maize meal)

3.3.5 Body parts

Muvhili (body)

3.3.6 Humans

Human means relating to or concerning people.

Mulala (old people)

3.3.7 Plant

A plant is a living plant that grows in the earth and has a stem, leaves, and roots.

Muri (tree)

3.3.8 Animals

An animal is a living creature such as a dog or horse, rather than a bird, fish, insect, or human.

Tshivhanda (wild animal)

3.3.9 Action

Action is doing something for a particular purpose

Mutshino (dance)

3.3.10 Event

An event is something that happens, especially something unusual or important.

Mathomo (beginning)

3.3.11 State

Fulufhelo (trust worthiness)

3.3.12 Ilness

Illness is the fact or experience of being ill.

Mapele (leprosy)

3.3.13 Culture

Culture consists of the ideas, customs and art produced by a particular society.

Vhadzimu (ancestors)

3.3.14 Communication

Communication is the activity or process of giving information to other people or living things.

Mavheevhee (rumours)

3.3.15 Cognition

Cognition is the mental process involved in knowing, learning, and understanding things, a formal word.

Vhuleme (problem)

3.3.16 Feeling

A feeling is an emotion or attitude.

Dakalo (joy)

3.3.17 Time

Time is what we measure in hours, days and years.

Vhuria (winter)

3.3.18 Place

A place is any building, area, town, or country.

Mathaga (wild veld)

3.4 MASS NOUNS AND NOMINAL CLASSES IN TSHIVENDA

In this section each of the nominal classes will be investigated to establish whether there are any mass nouns in these classes. Such nouns will then be tested through morphological and syntactic features which are typical of mass nouns.

3.4.1 Natural phenomena

Natural phenomena refer to something that exists and can be experienced by the senses. Such things exist ordinarily in the world and they are not caused, made or controlled by people.

Within this nominal class there are seven subclasses, i.e. earth, light, weather, noise, smoke, power and sky. Each of these subsections will now be looked into separately.

3.4.1.1 Earth

The nominal class **earth** refer to the world on which we live especially the surface and the soil. There are four subdivisions within this class i.e. soil, mountain, water and vegetation.

Soil

The term soil refers to the top covering of the earth in which plants may grow. The following nouns in Tshivenḓa may have this reference:

(1)   a. Mavu (soil, class 6)

Compounds with 'mavu':

Mavulutombo (gravelly soil)

Mavutshakwane (fertile loam)

b. Vumba/mavumba (clay soil, class 5/6)

c. Vunguvungu (soft sandy soil, class 5)

d. Buse (dust, class 5)

e. Maṱafa (marshy ground, class 6)

f.   Matope (soft mud, class 6)

g. Muṱavha (sand, class 3)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

a. Noun class

The nouns in (1a; 1e; 1f, 1g) may only appear with the prefix **ma-** of class 6 and they may thus be regarded as mass nouns.

The noun in (1b): Mavumba may only appear in noun class prefix 5/6, while the noun in (1c): Vunguvungu may only appear in noun class prefix 5/6.

These two nouns may then be considered as mass nouns.

The remaining two nouns in (1) above i.e. Muṱavha in (1h) and buse (1d) may appear with two prefixes.

(2)   a. Muṱavha / miṱavha (sands, class 3/4)

b. Buse / mabuse (dusts, class 5/6)

In the case of (2a) above the mass noun is Muṱavha. When this noun appears with the plural prefix Mi- as in Miṱavha, there will be a difference in meaning, i.e. this plural noun Miṱavha refer to different kinds of sand. In (2b) the noun (buse) also indicate a mass noun but it may appear with the prefix Ma- as in Mabuse. In this case there is also a difference in meaning, i.e. the noun will now refer to a large quantity of dust or a lot of dust.

b.   Diminutive

The diminutive which appears with mass nouns has to refer to a small quantity. The suffix **–nyana** usually appears with this meaning.

(3)   a. Mavunyana (small quantity of soil)

b. Vumbanyana (small quantity of clay soil)

c. Vunguvungunyana (small quantity of soft sand soil)

d. Maṱafanyana (small quantity of marshy ground)

e. Matopenyana (small quantity of soft mud)

f. Mavulutombonyana (small quantity of gravelly soil)

g. Mavutshakwanenyana (small quantity of fertile loam soil)

Syntactic features

a. Appearance with quantifiers

Numerals

Mass nouns may not appear with numerals:

(4) *a. Mavu mavhili (two soil)

    *b. Maṱafa mararu (three marshy ground)

    *c. Mavumba mararu (five clay soil)

    *d. Muṱavha muraru (three sandy soil)

    *e. Mavulutombo mavhili (two gravelly soil)

Universal quantifier

Both count and mass nouns may appear with **-oṱhe**.

(5) a. Mavu oṱhe (all the soil)

    b. Mavumba oṱhe (all clay soil)

    c. Vungungu ḽoṱhe (all soft sandy soil)

    d. Muṱavha woṱhe (all sand soil)

    e. Mavulutombo oṱhe (all gravelly soil)

    f. Mavutshakwane oṱhe (all fertile loam soil)

    g. Buse ḽoṱhe (all dust)

Quantifier adjectives

The adjectives stems **–nzhi** and **–ṱuku** may appear with count and mass nouns

(6) a. Mavu manzhi (a huge quantity of soil)

      Mavu maṱuku (a small quantity of soil)

    b. Mavumba manzhi (a huge quantity of clay) soil

       Mavumba maṱuku (a small quantity of clay)soil

    c. Vunguvungu ḽinzhi (a huge quantity of soft sand soil)

       Vunguvungu ḽiṱuku (a small quantity of soft sandy soil)

d. Maṱafa manzhi (a huge quantity of marshy ground)

Maṱafa maṱuku (a small quantity of marrshy ground)

e. Muṱavha munzhi (a huge quantity of sand soil)

Muṱavha muṱuku (a small quantity of sand soil)

f. Buse ḽinzhi (a huge quantity of dust)

Buse ḽiṱuku (a small quantity of dust)

g. Mavulutombo manzhi (a huge quantity of gravelly soil)

Mavulutombo maṱuku (a small quantity of gravelly soil)

b. Appearance as subject of reciprocal verbs

(7) Reciprocal verbs with **–ana**

With the prefix Ma-

Mavu a a ṱangana

(The soil mixes)

With a singular prefix **Mu-**

Muṱavha u a welana.

(The sandy soil falls on one another).

Vumba i a elana.

(The clay soil is the same)

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic features of mass nouns:

(i)   Nouns which appears with one prefix which accept features of mass nouns:

a. Maṱafa

b. Matope

    c. Mavu

    d. Vumba

    e. Mavulutombo

(ii) Nouns which appear with two prefixes which accept features of mass nouns.

    a. Buse

    b. Muṱavha.

    c. Vunguvungu

Mountain (thavha)

A mountain is a very high area of land with steep sides

(1) a. Thavha (mountain, class 9)

    b. Tshikwara (hillock, class 7)

    c. Tshivhanga (hill, class 7)

    d. Luwa (cliff, class 11)

    e. Muedzi (ravine, class 3)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns morphological features nouns.

Morphological features
Nounclass

The nouns in (1) above have singular prefixes. In the nouns above, the prefixes are Tshi- of class 7, Mu- of class 3 and (Ḽi-) of class 9

(2) a. Thavha /dzithavha (mountains, class 9/10)

    b. Tshikwara /zwikwara (hillocks, class 7/8)

    c. Tshivhanga /zwivhanga (hills, class 7/8)

    d. Luwa / nngwa (cliffs, class 11/10)

    e. Muedzi / miedzi (ravines, class 3/4)

These nouns may then not be considered as mass nouns because they have regular plurals.

Conclusion

The following nouns do not accept all these features and they should then not be considered as mass nouns: thavha, tshikwara, luwa, and muedzi

Water (maḓi)

Water is described as a colourless odourless liquid that is a compound of hydrogen and oxygen.

The following hyponyms refer to this substance in its various forms:

(1) a. Maḓi (water, class 6)

 b. Tshisima (fountain; spring, class 7)

 c. Mulambo (river, class 3)

 d. Khunzikhunzi (bay, class 9)

 e. Lwanzhe (sea, class 11)

 f. Tivha (deep pool of water, class 5)

 g. Dzivha (pool; lake, class 5)

 h. Ḓanzhe (ocean, class 5)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

a. Noun class

The nouns in (1a), 1h) may only appear with one noun class prefix, i.e. the prefix Ma- of class 6 and they may thus be regarded as mass nouns.

(2) a. Tshisima / zwisima (springs, class 7/8)

 b. Mulambo / milambo (rivers, class 3/4)

 c. Khunzikhunzi / dzikhunzikhunzi (bays, class 9/10)

 d. Lwanzhe / malwanzhe (seas, class 11/6)

 e. Tivha / mativha (deep pools, class 5/6)

 f. Dzivha / madzivha (lakes, class 5/6)

 g. Ḓanzhe / maḓanzhe (oceans, class 5/6)

The nouns in (2) above may then not be considered as mass nouns

b. Diminutive

The diminutive which appears with mass nouns has to refer to a small quantity. The suffix –nyana usually appears with this meaning:

(3) a. Maḓinyana (a small quantity of water)

   b. Mashikanyana (a small quantity of used water)

Syntactic features

a. Appearance with quantifiers

Numerals

Mass nouns may not appear with numerals.

(4)   *a. Maḓi mavhili (two water)

   *b. Mashika mararu (three used water)

Universal quantifier

Both count and mass nouns may appear with **-oṱhe:**

(5) a. Maḓi oṱhe (all water)

   b. Mashika oṱhe (all used water)

Quantifier which are adjectives

The adjectives stems **–nzhi** and **–ṱuku** may appear with mass and count nouns.

(6)   a. Maḓi manzhi (a huge quantity of water)

      Maḓi maṱuku (a small quantity of water)

   b. Mashika manzhi (a huge quantity of used water)

      Mashika maṱuku (a small quantity of used watar)

b. Appearance as subject of reciprocal verbs

(7)   a.   Reciprocal verbs with –ana.

      Mashika a a ṱangana

      (The used water mixes)

b.   Maḓi a a vangana

      (The water mixes).

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic features of mass nouns:

Nouns which appear with one prefix and which accept features of mass nouns: mashika and maḓi

The following nouns do not accept all these features and they should then not be considered as mass nouns: tshisima, khunzikhunzi, lwanzhe, mulambo, dzivha, and ḓanzhe.

Vegetation

Vegetation is plant life in general. The following nouns appear in this class:

(1)   a. Ḓaka (forest, class 5)

       b. Luṱorio (area covered with bushes, class 11

       c. Deme (dark forest, class 5)

       d. Lunzi (dense area of maize, class 11)

       e. Ḓinzwi (dense area of vegetation, class 21)

       f. Madzula (remaining weeds, class 6)

       g. Makukwe (debris, class 6)

       h. Makwakwa (plants, class 6)

       i. Maswinzwilo (undergrowth, class 6)

The nouns in (1) above will now be investigated through certain Morphological and Syntactic features to see whether they are mass nouns

Morphological features
Noun class
The nouns in (1b; 1d; 1e; 1f; 1g; h; 1i) may only appear with the prefix Ma- of class 6, the prefix Lu- of class 11 and ḓi- of class 21 and they may thus be regarded as mass nouns.

The remaining nouns in (1) above may appear with two prefixes.

(2)   a. Ḓaka / maṱaka (forests, class 5/6)

b. Deme / mademe (dark forests, class 5/6)

These nouns may then not be considered as mass nouns.

d. Diminutive

The diminutive which appears with mass nouns has to refer to a small quantity. The suffix **-nyana** usually appear with this meaning:

(3) a. Madzulanyana (a small quantity of remaining weeds)

b. Makukwenyana (a small quantity of debris)

c. Makwakwanyana (a small quantity of plants)

d. Maswinzwilonyana (a small quantity of undergrowth)

e. Luṱorinyana (a small quantity of area covered with bushes)

f. Lunzinyana (a small quantity of dense area of maize)

g. Ḓinzwinyana (a small quantity of dense area of vegetation)

Syntactic features

a. Appearance with quantifiers

Numerals

Mass nouns may not appear with **numerals**

(4)   *a. Madzula mavhili (two remaining weeds)

*b. Makukwe maṱanu (five debris)

*c. Makwakwa mararu (three plants)

*d. Maswinzwilo maṋa (four undergrowth)

*e. Luṱori luvhili (two area covered with bushes)

*f. Lunzi luraru (three dense area of maize

*g. Ḓinzwi ḽiraru (three dense area of vegetation)

Universal quantifier

Both count and mass nouns may appear with **-othe**:

(5) a. Madzula othe (all remaining weeds)

    b. Makukwe othe (all debris)

    c. Makwakwa othe (all plants)

    d. Maswinzwilo othe (all undergrowth)

    e. Lutori lwothe (all dense area of covered with bushes)

    f. Lunzi lwothe (all dense area of maize)

    g. Dinzwi lothe (all dense area of vegetation)

Quantifier adjectives

The adjectives stem –nzhi and –tuku may appear with mass and count nouns.

  (6) a. Madzula manzhi (a huge quantity of remaining weeds)

          Madzula matuku (a small quantity of remaining weeds)

      b. Makukwe manzhi (a huge quantity of debris)

         Makukwe matuku (a small quantity of debris)

      c. Makwakwa manzhi (a huge quantity of plants)

         Makwakwa matuku (a smallquantity of plants

      d. Maswinzwilo manzhi (a huge quantity of undergrowth)

         Maswinzwilo matuku (a small quantity of undergrowth)

      e. Lutori lunzhi (a huge quantity of dense area of covered with bushes)

         Lutori lutuku (a small quantity of dense area of covered with

         bushes)

     f. Lunzi lunzhi (a huge dense area of maize)

        Lunzi lutuku (a small dense area of maize)

     g. Dinzwi linzhi (a huge dense area of vegetation)

        Dinzwi lituku (a small dense area of vegetation)

b. Appearance as subjects of reciprocal verbs

(7) a. Reciprocal verbs with **–ana:**

(i) with the prefix **Ma-**

    a. Makukwe a a vangana.

      (The debris become mixed up)

    b. Madzula a a ṱangana

      (The remaining weeds mix).

(ii) With the prefix **Lu-**

    a. Lunzi lu a welana.

      (The dense area of maize falls on one another)

    b. Luṱori lu a elana.

      (The dense area of covered with bushes is the same)

Conclusion

From the discussion above the following nouns accept all the morphological and syntactic features of mass nouns.

Nouns which appear with one class prefix and which accept features of mass nouns

    a. Makukwe; makwakwa, maswinzwilo, luṱori, lunzi, ḓinzwi and madzula.

The following nouns do not accept all those features and they should then not be considered as mass nouns ḓaka and deme.

3.4.1.2   Light

Light is defined as radiation that stimulates the sense of sight and makes things visible. The following hyponyms refer to light in one way or another

(1) a. Tshedza (light, class 7)

    b. Swiswi (darkness, class 5)

    c. Liṱalazaza (ray of sunlight, class 5)

    d. Masana (rays of sunlight, class 6)

e. Duvha (sun, day class 5)

f. Murunzi (shadow of a tree, class 3)

g. Tshirunzi (shadow of a late person, class 7)

h. Mapfuvhi (redness in the sky before sunrise, class 6)

i. Nwedzi (moon, class 3)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

a.   Noun class

The nouns in (1a; 1d; 1h) may only appear with one noun class prefix and they may thus be regarded as mass nouns

The following nouns in (1) above may appear with two prefixes

(2) a. Swiswi / maswiswi (darknesses, class 5/6)

b. Litalazaza / matalazaza (rays of sunlight, class 5/6)

c. Murunzi / mirunzi (shadows of an objects or trees, class 3/4)

d. Tshirunzi / zwirunzi (ghosts, class 7/8)

e. Duvha / maduvha (sun, days, class 5/6)

f. Nwedzi / minwedzi (moon; months, class 3/4)

These nouns may then not be considered as mass nouns.

c. Diminutive

The diminutive which appears with mass nouns has to refer to a small quantity. The suffix **–nyana** usually appears with this meaning.

(3)   a. Masananyana (a small quantity of rays of sunlight)

b. Tshedzanyana (a small quantity of light)

c. Mapfuvhinyana (a small quantity of redness in the sky before sunrise)

Syntactic features

a.   Appearance with quantifiers

Numerals

Mass nouns may not appear with numerals.

(4) *a. Masana mavhili (two rays of sunlight)

    *b. Mapfuvhi mararu (three redness in the sky before sunrise)

    *c. Tshedza tshithihi (one light)

Universal quantifier

Both count and mass nouns may appear with -o̠the!

(5)   a. Masana o̠the. (all rays of sunlight)

      b. Mapfuvhi o̠the. (all redness in the sky before sunrise)

      c. Tshedza tsho̠the. (all light)

Quantifier adjectives

The adjective stems **–nzhi** and **–t̠uku** may appear with mass and count nouns:

(6)   a. Masana manzhi (a huge quantity of rays of sunlight)

       Masana mat̠uku (a small quantity of rays of sunlight)

     b. Mapfuvhi manzhi (a huge quantity of redness in the sky before

       sunrise)

       Mapfuvhi mat̠uku (small quantity of redness in the sky before sunrise)

     c. Tshedza tshinzhi (a huge quantity of light)

       Tshedza tshit̠uku (a small quantity of light)

Appearance as subjects of reciprocal verbs

(7)   a. Reciprocal verbs with **–ana**

       Masana a a t̠angana

       (Rays of sunlight meet with another)

      b. Reciprocal verbs with a singular prefix

       Tshedza tshi a welana.

       (The light falls on one another).

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic features of mass nouns.

(i)   Nouns which appear with one prefix which accept features of mass nouns Mapfuvhi, tshedza and masana.

The following nouns do not accept all those features and they should then not be considered as mass nouns: swiswi; ḓuvha; nwedzi; murunzi, tshirunzi and ḽiṱalazaza.

3.4.1.3   Weather

The weather is the condition of the atmosphere in an area at a particular time, for example, it is raining, hot or windy.

Rain

Rain refers to drops of water that fall from the sky. The following words are associated with rain in its various forms.

(1)   a. Mvula (rain, class 9)

  b. Vhusuṱo (drizzle, class 14)

  c. Mibvumbi (steady soaking rain, class 4)

  d. Mahaḓa (front, class 6)

  e. Tshifhango (hail, class 7)

  f. Tshirulu (storm, class 7)

  g. Nwando (dew, class3)

  h. Khuli (mist, class 9)

  i. Tshikegulu (thick ground mist, class 7)

  j. Gole (cloud, class 5)

  k. Tshikolela (rain from small cloud, class 7)

  l. Tsinyamaṱanga (rain that falls in winter class 9)

  m. Lupenyo (lighting, class 11)

  n. Mubvumo (thunder, class 3)

  o. Gomelelo (drought, class 5)

  p. Mikumbela (floods, class 4)

q. Manyaḓi (mist weather, class 6)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see wheather they are mass nouns

Morphological features

a. Noun class

The following nouns in (1b; 1d; 1q) may only appear with the prefix **ma-** of class 6 and the class prefix **Vhu-** of class 14 and they may thus be regarded as mass nouns.

The following nouns in (1) above may appear with two prefixes

(2) a. Mvula / dzimvula (rain, class 9/10)

    b. Mubvumbi / mibvumbi (steady soaking rain, class 3/4)

    c. Tshifhango /zwifhango (hails, class 7/8)

    d. Tshirulu /zwirulu (storms, class 7/8)

    e. Ṅwando / minwado (dew, class 3/4)

    f. Khuli / dzikhuli (mist, class 9/10)

    g. Tshikegulu / zwikegulu thick ground mist, class 7/8)

    h. Gole / makole (clounds, class 5/6)

    i. Tshikolela /zwikolela (rain from small clouds, class 7/8)

    j. Tsinyamaṱanga / dzitsinyamaṱanga (rain that falls in winter, class 9/10)

    k. Lupenyo / vhupenyo (lightnings, class 11/14)

    l. Mubvumo / mibvumo (thunders, class 3/4)

    m. Gomelelo / magomelelo (droughts, class 5/6)

    n. Mukumbela / mikumbela (floods, class 3/4)

These nouns may then not be considered as mass nouns.

b. Dimininutive

The diminunitive which appears with mass nouns has to refer to a small quantity. The suffix **–nyana** usually appears with this meaning

(1) a. Vhusuṱonyana (a small quantity of drizzle)

    b. Mahaḓanyana (a small quantity of frost)

    c. Manyaḓinyana (a small quantity of mist weather)

Syntactic features

a. Appearance with quantifiers

Numerals

Mass nouns may not appear with numerals

(4) *a. Vhusuṱo vhuvhili (two drizzles)

  *b. Mahaḓa mararu (three frosts)

  *c. Manyaḓi maṋa (four mist weathers)

Quantifier adjectives

The adjectives stem **–nzhi** and **–ṱuku** may appear with mass and cound nouns

(5) a. Vhusuṱo vhunzhi (a huge quantity of drizzle)

    Vhusuṱo vhuṱuku (a small quantity of drizzle)

  b. Mahaḓa manzhi (a huge quantity of frost)

    Mahaḓa maṱuku (a small quantity of frost)

  c. Manyaḓi manzhi (a huge quantity of mist weather)

    Manyaḓi maṱuku (a small quantity of mist weather)

Universal quantifier

Both count and mass nouns may appear with **–oṱhe**

(6) a. Vhusuto hoṱhe (all drizzles)

  b. Mahaḓa oṱhe (all frosts)

  c. Manyaḓi oṱhe (all mist weathers)

b. Appearance as subject of reciprocal verbs

(i) Reciprocal verbs with –ana.

  With the prefix **ma-** and **vhu-**

  a. Vhusuṱo vhu a tevhekana

    (The drizzle days follow each other)

  b. Mahaḓa a khou khokhana.

    (The frost if pilling on one another)

  c. Manyaḓi a a tevhekana

    (The mist weather follow each other)

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic features and they should be regarded as mass nouns: mahaḓa, manyaḓi and vhusuṱo.

The following nouns do not accept all those features and they should then not be considered as mass nouns: mvula, mibvumbi, tshifhango,tshirulu; ṅwando, khuli etc.

Wind

Scientifically wind denotes a current of air and the following hyponyms refer to its various types

(1) a. Muya (wind, class 3)

   b. Ḓumbumazwikule (tornado, class 5/6)

   c. Tshiḓumbumukwe (whirl wind, class 7)

   d. Maḓumbu (stormy wind, class 6)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

Noun class

The following nouns in (1) above may appear with two prefixes:

(2) a. Muya / mimuya (winds, class 3/4)

   b. Ḓumbumazwikule / maḓumbumazwikule (tornados, class 5/6)

   c. Ḓumbu / maḓumbu (stormy winds, class 5/6)

These three nouns may then not be considered as mass nouns.

Conclusion

The following nouns do not accept all those features and they should then not be considered as mass nouns: muya; ḓumbumazwikule and ḓumbu.

3.4.1.4   Noise

A noise is a sound that someone or something makes. The following nouns in Tshivenḓa are associated with noise.

(1)　　a. Phosho (noise, class 9)

　　　　b. Khalo (tone, class 9)

　　　　c. Mubvumo (sound, class 3)

　　　　d. Muludzi (whistling, class 3)

　　　　e.   Khombole (loud whistling, class 9)

　　　　f. Tshokotshoko (rattling noise, class 9)

　　　　g. Tshililo (cry, class 7)

　　　　h. Mukosi (cry, class 3)

　　　　i. Mahovhohovho (noise of rapids class 6)

　　　　j. Gosi (loud cry, class 5)

　　　　k. Mahuvhula (great roar, class 6)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns

Morphological features

a. Noun class

The nouns in (1i; 1k) may only appear with one noun class prefix Ma- of class 6 and they may thus be regarded as mass nouns.

The following nouns in (1) above may appear with two prefixes

(2) a. Phosho (noise / dziphosho (noises, class 9/10)

　　b. Khalo (tone) / dzikhalo (tones, class 9/10)

　　c. Mubvumo / mibvumo (sounds, class 3/4)

　　d. Muludzi (whistling) / miludzi (whistling, class 3/4)

　　e. Khombole (loud whistling) noise / dzikhombolwe (loud whistlings, class 9/10)

　　f. Tshokotshoko (rattling noise) dzitshokotshoko (rattling noises, class 9/10)

　　j. Tshililo (cry) / zwililo (cries, class 7/8)

k. Mukosi (cry) / mikosi (cries, class 3/4)

l. Gosi (loud cry) / magosi (loud cries, class 5/6)

These nouns may then not be considered as mass nouns.

e. Diminutive

The diminutive which appears with mass nouns has to refer to a small quantity. The suffix **–nyana** usually appear with this meaning.

(3) a. Mahovhohovhonyana (a small quantity of noise of rapids)

b. Mahuvhulanyana (a small quantity of great roar)

Syntactic features

a. Appearance with quantifiers

Numerals

Mass nouns may not appear with numerals

(4) *a. Mahovhohovho mavhili (two noises of rapids)

*b. Mahuvhula maṋa (four great roars)

Universal quantifier

Both count and mass nouns may appear with **-oṱhe**

(5) a. Mahovhohovho oṱhe (all the noises of rapids)

b. Mahuvhula oṱhe (all the great roars)

Quantifier adjectives

The adjective stems **-nzhi** and **–ṱuku** may appear with mass and count nouns

(6) a. Mahovhohovho manzhi (a huge quantity of noise of rapids)

b. Mahuvhula maṱuku (a small quantity of great roar)

b. Appearance as subjects of reciprocal verbs

(7) Reciprocal verbs with –ana

With the prefix **Ma-**

a. Mahovhohovho a a ṱangana

(The noise of rapids mix)

b. Mahuvhula a a vangana

(The great roar become mixed up)

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic features and they should be regarded as mass nouns:

(i) Nouns which appear with prefix Ma- of class 6

Mahovhohovho and mahuvhula

The following nouns do not accept all these features and they should then not be considered as mass nouns phosho; khalo; mubvumo; muludzi, khombole; tshokotshoko; tshililo; mukosi and gosi.

3.4.1.5 Smoke

Smoke denotes a substances that is the mixture of gas and solid particles given off by burning substances. There are very few words that refer to smoke in Tshivenḓa.

(1) a. Vhutsi (smoke, class 14)

b. Ḓitsi (great cloud of dense smoke)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns

Morphological features

The noun in (1a) may only appear with the prefix Vhu- of class 14 and it may thus be regarded as a mass noun.

The following nouns in (1) above, i.e. ḓitsi may appear with two prefixes

(2) Ḓitsi / maḓitsi (class 21/6)

This noun may then not be considered as mass noun

b. Diminutive

The diminutive which appears with mass nouns has to refer to a small quantity. The suffix –nyana usually appears with this meaning.

(3)   Vhutsinyana (a small quantity of smoke)

Syntactic features

a. Appearance with quantifiers

Numerals

Mass nouns may not appear with numerals

(4)* Vhutsi vhuvhili (two smokes)

Universal quantifier

Both count and mass nouns may appear with -oṱhe

(5) Vhutsi hoṱhe (all the smokes)

Quantifier adjectives

The adjective stems –nzhi and –ṱuku, may appear with mass and count nouns:

(6) Vhutsi vhunzhi (a huge quantity of smoke)

    Vhutsi vhuṱuku (a small quantity of smoke)

Appearance as subjects of reciprocals verbs

(7) Reciprocal verbs with –ana

Vhutsi vhu a welana

(The smoke comes after one another)

Conclusion

From the discussion above, the following noun accepts all the morphological and syntactic features and it should then be regarded as mass noun: vhutsi. The following noun does not accept all features and it should then not be considered as mass noun: ḓitsi.

3.4.1.6   Maanḓa (power)

The word power refers to ability to do something or someone who has power or control people and activities. The following nouns in Tshivenḓa may have this reference.

(1)   a. Maanḓa (power, class 6)

  b. Muḓagasi (electricity, class 3)

  c. Mafulufulu (energy, class 6)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

a. Noun class

The nouns in (1a, 1c) may appear with noun class prefix Ma- of class 6 and they may thus regarded as mass nouns.

In the case of (1b), above, the mass noun is muḓagasi. When this noun appears with the plural prefix Mi- as in miḓagasi, there will be a difference in meaning. i.e. this plural noun will now refer to different kinds of electricity.

b. Diminutive

The diminutive which appears with mass nouns has to refer to a small quantity. The suffix **–nyana** usually appears with this meaning

(3) a. Maanḓanyana (a small quantity of power)

  b. Mafulufulunyana (a small quantity of energy)

  c. Muḓagasinyana (a small quantity of electricity)

Syntactic features

a. Appearance with quantifiers

Numerals

Mass nouns may not appear with numerals

(4) *a. Maanḓa mavhili (two powers)

*b. Mafulufulu mararu (three energies)

*c. Muḓagasi muṋa (four electricities)

Universal quantifiers

Both count and mass nouns may appear with **-oṱhe**:

(5) a. Maanḓa oṱhe (all the power)

    b. Mafulufulu oṱhe (all energy)

    c. Muḓagasi woṱhe (all the electricity)

Quantifier adjectives

The adjective stems **–nzhi** and **–ṱuku** may appear with mass and count nouns

(6) a. Maanḓa manzhi (a huge quantity of power)

        Maanḓa maṱuku (a small quantity of power)

    b. Mafulufulu manzhi (a huge quantity of energy)

        Mafulufulu maṱuku (a small quantity of energy)

    c. Muḓagasi munzhi (a huge quantity of energy)

        Muḓagasi muṱuku (a small quantity of energy)

a. Appearance as a subject of reciprocal verbs

(i) Reciprocal verbs with –ana.

    With the prefix **Ma-**

  a. Maanḓa a a ṱangana

    (The power mixes)

  b. Mafulufulu a a eḓana

    (The energy is the same)

With a singular prefix

  c. Muḓagasi u a welana

    (The electricity falls on one another)

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic features of mass nouns:

(i) Nouns which appear with one prefix and accept features of mass nouns:

    a. Maanḓa (power)

    b. Mafulufulu (energy)

Noun which appears with two prefixes and accepts features of mass nouns; Muḓagasi (electricity)

3.4.1.7 Sky

Sky means the space above the earth appearing blue in daylight on fine days and dark during the night. The following nouns in Tshivenda are associated with the **sky:**

(1) a. Liṱaḓulu (sky, class 5)

    b. Tshikhala (space, class 7

    c. Ṉaledzi (star, class 9)

    d. Masase (morning star, class 9)

    e. Ṅwedzi (moon, class 3)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns

Morphological features

Noun class

The following nouns in (1) above may appear with two prefixes:

(2) a. Liṱaḓulu / maṱaḓulu (skies, class 5/6)

    b. tshikala /zwikhala (spaces, 7/8)

    c. Ṉaledzi / dziṋaledzi (stars, class 9/10)

    d. Ṅwedzi / miṅwedzi (moon, months class 3/4)

    e. Masase / masase (morning star, class 9)

These nouns may then not be considered as mass nouns

Conclusion

The following nouns in (1) above do not accept all those features and they should then not be considered as mass nouns ḽiṱaḓulu, tshikhala, nwedzi, naledzi and masase.

3.4.2 Natural objects

Natural objects are those objects produced by nature. In Tshivenḓa natural objects may be classified as follows:

3.4.2.1 Objects

An object is something that can be seen or touched and the following hyponyms refer to an objects:

(1) a. Tombo (stone, class 5)
   b. Tsimbi (iron, class 9)
   c. Daimani (diamond, class 9)
   d. Musina (copper, class3)
   e. Musuku (gold, class 3)
   f. Thanda (wood, class 9)
   g. Khuni (firewood, class 9)
   h. Muora (ash, class 3)
   i. Nonzhe (resin, glue, class 9)
   j. Muno (salt, class 3)
   k. Thase (spark, class 9)
   l. Mulilo (fire, class 3)
   m. Mulimo (poison, class3)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns

Morphological features:

a. Noun class

The following nouns may appear with two noun class prefixes and they may thus be

regarded as mass nouns.

(1) a. Musina (copper) / misina (copper)

Musuku (gold) / misuku (golds)

Nonzhe (resin) / dzinonzhe (resin)

Muno (salt) / mino (salts)

In the case of 1 above all the nouns are the mass nouns. When the above nouns appear with the plural prefixes there will be no differences in their meanings. Their plural prefixes refer to the plural only and they may thus be regarded as the mass nouns.

The following nouns may appear with two prefixes

(2) a. Tombo (stone) / matombo (stones, class 5/6)

b. Tsimbi (iron) / dzitsimbi (irons, class 9/10)

c. Daimani (diamonds) / dzidaimani (diamonds, class 9/10)

d. Thanda (wood) / dzithanda (woods, class 9/10)

e. Khuni (firewood) / dzikhuni (firewoods, class 9/10)

f. Muora (ash) / miora (ashes, class 3/4)

g. Thase (spark) / dzithase (sparks, class 9/10)

h. Mulilo (fire) / mililo (fires, class 3/4)

All these nouns may then not be considered as mass nouns

b. Diminutive

The diminutive which appears with mass nouns has to refer to a small quantity. The suffix **–nyana** usually appears with this meaning.

(3) a. Musinanyana (a small quantity of copper)

b. Musukunyana. (a small quantity of gold)

c. Nonzhenyana. (a small quantity of resin, gum)

d. Munonyana (a small quantity of salt)

e. Mulimonyana (a small quantity of poison)

Syntactic features

a. Appearance with quantifiers

Numerals

Mass nouns may not appear with **numerals**

(4) *a. Musina muraru (three coppers)

    *b. Musuku muvhili (two golds)

    *c. Nonzhe tharu (three resin, gums)

    *d. Muno muvhili (two salts)

    *e. Mulimo muraru (three poisons)

Quantifier adjectives

The adjective stems **–nzhi** and **–tuku** may appear with mass and count nouns.

(5) a. Musina munzhi (a huge quantity of copper)

     Musina mutuku (a small quantity of copper)

  b. Musuku munzhi (a huge quantity of gold)

     Musuku mutuku (a small quantity of gold

  c. Nonzhe nnzhi (a huge quantity of resin, gum)

     Nonzhe thukhu (a small quantity of resin, gum)

  d. Muno munzhi (a huge quantity of salt)

     Muno mutuku (a small quantity of salt)

  e. Mulimo munzhi (a huge quantity of poison)

     Mulimo mutuku (a small quantity of poison)

Universal quantifier

Both count and mass nouns may appear with **-othe:**

(6) a. Musina wothe (all copper)

  b. Musuku wothe (all gold)

  c. Nonzhe yothe (all resin, gum)

  d. Muno wothe (all salt)

  e. Mulimo wothe (all poison)

c. Appearance as subjects of reciprocal verbs

(7). Reciprocal verbs with –ana

With a singular prefix

a. Musuku u a elana

(The gold is the same)

b. Musina u a welana

(The copper falls on one another)

c. Mulimo u a vangana

(The poison is mixed up)

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic features of mass nouns

(i) Nouns which appear with one prefix and they accept features of mass nouns:
Musuku, musina, mulimo, nonzhe, and muno.

The following nouns do not accept all those features and they should then not be considered as mass nouns: tombo; tsimbi; daimane; thanda; khuni, thase etc.

3.4.2.2   Mark

A mark of something is a sign of typical feature of it. The following nouns in Tshivenda are associated with the mark.

(1) a. Livhadzi (scar, class 5)

b. Mutwe (crack, class 3)

c. Phopho (weal on body, class 9)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns

Morphological features

a. Noun class

The following nouns may appear with two prefixes

(1)   a. Livhadzi / mavhadzi (scars, class 5/6)

    b. Mutwe / mitwe (cracks, class 3/4)

    c. Phopho / dziphopho (weals on body, class 9/10)

These nouns may then not be considered as mass nouns.

Conclusion

The following nouns do not accept all those features and they should then not be considered as mass nouns: Livhadzi; mutwe and phopho.

3.4.2.3   Descriptive objects

The following nouns in Tshivenda are associated with descriptive objects:

(1)   a. Lutongwa (any long and thin, class11)

    b. Luvhata (flat, broad hard thing , class 11)

    c. Gwengo (projecting part of blade, class 5)

    d. Tshikwati (dry part of anything, class7)

    e. Tshikorokoro (something old and broken, class 7)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

Noun class

The following nouns may appear with two prefixes

(2)   a. Lutongwa /vvhutongwa class 11/14

    b. Luvhata / vhuvhata class 11/14

    c. Gwengo / magwengo class 5/6

    d. Tshiguthe / zwiguthe class 7/8

    e. Tshikwati / zwikwati class 7/8

    f. Tshikorokoro / zwikorokoro class 7/8

These nouns in (2) above may then not be considered as mass nouns

Conclusion

The following nouns do not accept all those features and they should then not be considered as mass nouns: Luṱongwa; luvhata; gwengo; tshiguthe etc

3.4.3 Artefact

Artefacts are products of human workmanship. The following nouns in Tshivenḓa are associated with artefact.

3.4.3.1 Household

The household is your home and everything connected with looking after it. The following nouns in Tshivenḓa are associated with household.

(1) a. Lufhanga (knife, class11)

b. Lebula (spoon, class 9)

c. Forogo (fork, class 9)

d. Ndilo (plate, class 9)

e. Khaphu (cup, class9)

f. Luswielo (broom, class11)

g. Khali (pot, class 9)

h. Geḓela (kettle, class 9)

i. Tshiṱofu (stove, class 7)

j. Musi (pestle, class 3)

k. Mutuli (mortar, class 3)

l. Boḓelo (bottle, class 5)

m. Bege (bag, class 9)

n. Tshiṱuṱulo (grinding stove, class 7)

o. Manngi (busket, class 3)

p. Khavho (calabash, class 9)

q. Tshidulo (chair, class 7)

r. Khamelo (milk-pail, class 9)

s. Ṱafula (table, class 9)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

Noun class

The following nouns in (1) above may appear with two prefixes:

(2) a. Lufhanga (knife)/dziphanga (knives, class 11/10)

b. Lebula (spoon)/dzilebula (spoons, class 9/10)

c. Forogo (fork)/dziforogo (forks, class 9/10)

d. Ndilo (plate)/dzindilo (plates, class 9/10)

e. Khaphu (cup)/dzikhaphu (cups, class 9/10)

f. Luswielo (broom)/vhuswielo (brooms, class 11/14)

g. Khali (pot)/dzikhali (pots, class 9/10)

h. Gedela (kettle)/dzigedela (kettles, class 9/10)

i. Tshitofu (stove)/zwitofu (stoves, class 7/8)

j. Musi (pestle)/misi (pestles, class 3/4)

k. Mutuli (mortar)/mituli (mortars, class 3/4)

l. Bodelo (bottle)/mabodelo (bottles, class 5/6)

m. Bege (bag)/dzibege (bags, class 9/10)

n. Tshitutulo/zwitutulo (grindinding stones, class 7/8)

o. Manngi/mimanngi (buskets, class 3/4)

p. Khavho (calabash)/dzikhavho (calabashes, class 9/10)

q. Tshidulo (chair)/zwidulo (chairs, class 7/8)

r. Khamelo (milk-pail), dzikhamelo (milk-pails, class 9/10)

s. Tafula (table/matafula) (tables, class 5/6)

All these nouns may then not be considered as mass nouns.

Conclusion

The following nouns do not accept all those features and they should then not be considered as mass nouns: gedela, tshitofu, musi, mutuli, bodelo, bege, tshitutulo, manngi etc.

3.4.3.2   Garden

A garden is an area of land next to a house with plants, trees and vegetables. The following nouns is Tshivenḓa are associated with gardens:

(1)   a. Phaiphi (pipe, class 9)

b. Bommbi (tap, class 9)

c. Tshipeidi (spade, class 7)

d. Fosholo (shovel, class 9)

e. Mugwala (crowbar, class 3)

f. Haraga (rake, class 9)

g. Piki (pick-axe, class 9)

h. Dzembe (plough, class 5)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns:

Morphological features

Noun class

The following nouns may appear with two prefixes:

(2)   a. Phaiphi (pipe)/dziphaiphi (pipes, class 9/10)

b. Bommbi (tap)/dzibommbi (taps, class 9/10)

c. Tshipeidi (spade)/zwipeidi (spades, class 7/8)

d. Fosholo (shovel)/dzifosholo (shovels, class 9/10)

e. Mugwala (crowbar)/migwala (crowbars, class 3/4)

f. Haraga (rake)/dziharaga (rakes, class 9/10)

g. Piki (pick-axe)/dzipiki (pick-axes, class 9/10)

h. Dzembe (plough)/malembe (ploughs, class 5/6)

These nouns may then not be considered as mass nouns.

Conclusion

The following nouns do not accept all those features and they should then not be considered as mass nouns. Phaiphi, bommbi, tshipeidi, fosholo, mugwala, haraga and piki.

3.4.3.3   Vehicle

Vehicle is a means of transporting people or goods, especially on land. The following nouns in Tshivenḓa are associated with **vehicle**.

(1)   a. Goloi, moḓoro (car, class 9)

        b. Gariki (wagon, class 9)

        c. Baisigila (bicycle, class 9)

        d. Thuthuthu (motor bicycle, class 9)

        e. Tshikepe (ship, class 7)

        f.   Tshiendedzi (vehicle, class 7)

        g. Bufho (aeroplane, class 5)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological feature

Noun class

The following nouns may appear with two prefixes:

(2)   a. Goloi (car)/dzigoloi (cars, class 9/10)

        b. Gariki (wagon)/dzigariki (wagons, class 9/10)

        c. Baisigila (bicycle)/dzibaisigila (bicycles, class 9/10)

        d. Thuthuthu (motor bicycle/dzithuthuthu (motor bicycles, class 9/10)

        e. Tshikepe (ship)/zwikepe (ships, class 7/8)

        f.   Tshiendedzi (vehicle)/zwiendedzi (vehicles, class 7/8)

        g. Bufho (aeroplane)/mabufho (aeroplanes, class 5/6)

These nouns may then not be considered as mass nouns.

Conclusion

The following nouns do not accept all those features and they should then not be considered as mass nouns goloi, gariki, baisigila, thuthuthu, tshikepe etc.

3.4.3.4   Building

Building is a permanent built structure that people can go into. The following nouns in Tshivenḓa are associated with **building**.

(1)   a. Nnḓu (house, class 9)

    b. Tshifhaṱo (building, class 7)

    c. Luvhondo (wall, class 11)

    d. Phuphu (pillar, class 9)

    e. Muṋango (door, class 3)

    f. Ṱhanga (roof, class 9)

    g. Tshiuludza (main rafter in roof of hut, class 7)

    h. Murango (foundation, class 3)

    i. Ḓulu (store-hut for food, class 5)

    j. Dumba (old dilapidated structure, class 5)

    k. Haisi (rectangular house, class 9)

    l. Ranḓavhula (roundawel, class 9)

    m. Tshiṱanga (kitchen-hut, class 7)

    n. Thumba (guard-house, class 9)

    o. Mushasha (squatterhut, class 3)

    p. Pfamo (palace, class 9)

    q. Tshitumba (kraal for goats) class 7)

    r. Danga (kraal for cattle, class 5)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

The following nouns may appear with two prefixes

(2)   a. Nnḓu/dzinnḓu (houses, class 9/10)

    b. Tshifhaṱo/zwifhaṱo (buildings, class 7/8)

    c. Luvhondo/dzimbondo (walls, class 11/10)

    d. Phuphu/dziphuphu (class 9/10) (pillars)

    e. Munango/minango (doors, class 3/4)

    f. Tshiuludza/zwiuludza (rafters, class 7/8)

    g. Thanga/dzithanga (roofs, class 9/10)

    h. Murango/mirango (foundations, class 3/4)

    i. Dulu/madulu (store huts for food, class 5/6)

    j. Dumba/matumba (old dilapidated structures, class 5/6)

    k. Haisi/dzihaisi (rectangular houses, class 5/6)

    l. Randavhula/dzirandavhula (roundawel, class 9/10)

    m. Tshitanga/zwitanga (kitchen-huts, class 7/8)

    n. Thumba/dzithumba (guard houses, class 9/10)

    o. Mushasha/mishasha(squatter huts, class 3/4)

    p. Pfamo/dzipfamo (palaces, class 9/10)

    q. Tshitumba/zwitumba (kraals for goats, class 7/8)

    r. Danga/madanga (kraals for cattle, class 5/6)

These nouns may then not be considered as mass nouns.

Conclusion

The following nouns do not accept all those features and they should then not be considered as mass nouns: nndu, tshifhato, luvhondo, phuphu, munango, thanga etc.

3.4.3.5   Music

Music is a pattern of pleasant or interesting sounds made by instruments or by the voice. The following nouns in Tshivenda are associated with music.

(1)   a. Katara (guitar, class 9)

       b. Phiano (piano, class 9)

       c. Ngoma (big drum, class 9)

       d. Tshigubu (small drum, class 7)

    e. Ṱirompiṱa (trumpet, class 9)

    f. Mbilamutondo (xylophone, class 9)

    g. Haripa (harp, class 9)

The nouns in (1) above will now be investigated through certain morphological and syntactical features to see whether are mass nouns.

Morphological features

Noun class

The following nous in (1) above may appear with two prefixes

(2)   a. Kaṱara (guitar)/dzikaṱara (guitars, class 9/10)

    b. Phiano (piano)/dziphiano (pianos, class 9/10)

    c. Ngoma (big drum)/dzingoma (big drums, class 9/10)

    d. Tshigubu (small drum)/zwigubu (small drums, class 7/8)

    e. Mbila (xylophone)/dzimbila (xylophones, class 9/10)

    f. Ṱirompiṱa (trumpet)/dziṱirompiṱa (trumpets, class 9/10)

    g. Mbilamutondo (xylophone)/dzimbilamutondo (xylophones, class 9/10)

    h. Haripa (harp)/dziharipa (harps, clas 9/10)

These nouns in (1) above may then not be considered as mass nouns.

Conclusion

From the discussion above, the following nouns do not accept all these features and they should then not be considered as mass nouns: kaṱara, phiano, ngoma, tshigubu, mbila, mbilamutondo etc.

3.4.3.6   Clothes

Clothes are things worm to cover the body. The following nouns in Tshivenḓa are associated with **clothes**

(1)   a. Hemmbe (shirt, class 9)

b. Badzhi (jacket, class 9)

c. Harane (thread, class 9)

d. Phuraphura (gown, class 9)

e. Gaweni (academic gown, class 5)

f. Murungo (seam, class 9)

g. Thai (tie, class 9)

h. Dugu (kopdoek, class 9)

i. Tshitivhili (buckle of belt, class 7)

j. Tshihaswa (patch work, class 7)

k. Gunubu (botton, class 9)

l. Ḽeri (napkin, diaper, class 5)

m. Muṅadzi (hat, class 3)

n. Vese (vest, class 9)

o. Vhurukhu (a pair of trouser, class 14)

p. Rokho (dress, class 9)

q. Sogisi (sock, class 9)

r. Mulenze (stocking, class 3)

s. Tshienda (shoe, class 7)

The nouns in (1) above will now be investigated through certain morphological and syntactical features to see whether they are mass nouns.

Morphological features

Noun class

The following nouns in (1) above may appear with two prefixes

(2) a. Hemmbe/dzihemmbe (shirts, class 9/10)

b. Badzhi/dzibadzhi (jackets, class 9/10)

c. Harane/dziharane (threads, class 9/10)

d. Phuraphura/dziphuraphura (gowns, class 9/10)

e. Gaweni/magaweni (academic gowns, class 5/6)

f. Murungo/mirungo (seams, class 3/4)

g. Thai/dzithai (ties, class 9/10)

h. Dugu/dzidugu (kopdoeke, class 9/10)

  i. Tshitivhili/zwitivhili (buckles of belt, class 7/8)

  j. Tshihaswa/zwihaswa (patches work, class 7/8)

  k. Gunubu/dzigunubu (buttons, class 9/10)

  l. Ḽeri/maḽeri (diapers, class 5/6)

  m. Muṅadzi (hat)/minadzi (hats, class 3/4)

  n. Vese/dzivese (vests, class 9/10)

  o. Vhurukhu/marukhu (trousers, class 14/6)

  p. Rokho/dzirokho (dresses, class 9/10)

  q. Swogisi/dziswogisi (socks, class 9/10)

  r. Muḽenze/miḽenze (stockings, class 3/4)

  s. Tshienda/zwienda (shoes, class 7/8)

These nouns in (1) above may then not be considered as mass nouns.

Conclusion

From the discussion above the following nouns do not accept all those features and they should then not beconsidered as mass nouns: hemmbe; badzhi, harane, phuraphura, gaweni, murungo, thai, dugu, tshitivhili, tshihaswa, gunubu, ḽeri, miṅadzi etc.

3.4.3.7   Ornaments

Ornament is an object displayed or worn as a decoration. The following nouns in Tshivenḓa are associated with **ornaments**.

(1)   a. Tshiṅina (earring, class 7)

        b. Rinngi (ring, class 9)

        c. Bengele (wristler, class 6)

        d. Vhulungu (necklace, class 14)

The nouns in (1) above will now be investigated through certain morphological and syntactical features to see whether they are mass nouns

Morphological features

Nouns class

The following nouns may appear with two prefixes

(2)   a. Tshinina / zwinina (earrings, class 7/8)

        b. Rinngi / dzirinngi (rings, class 9/10)

        c. Bengele / mabengele (wristler, class 5/6)

        d. Lulungu / vhulungu (necklaces, class 11/14)

These nouns in (2) above may then not be considered as mass nouns.

Conclusion

From the discussion above the following nouns do not accept all those features and they should then not be considered as mass nouns: tshinina; rinngi; bengele and vhulungu.

3.3.3.8   Instruments

Instruments are objects that are used as a means of doing something.

Wood instruments

Wood instruments are objects made from wood that are used as a means of doing something. The following nouns in Tshivenda are associated with wood instruments.

(1)   a. Mugo (walking-stick, class 3)

        b. Thamu (cane, class 9)

        c. Thonga (stick, class 9)

        d. Balaga (pole, class 9)

        e. Basha (pole for building houses, class 5)

        f. Mupfunda (fencing by branches of trees, class 3)

The nouns in (1) above will be investigated through certain morphological and syntactical features to see whether they are mass nouns.

Morphological features

Noun class

The following nouns may appear with two prefixes

(2)   a. Mugo / migo (walking-sticks, class 3/4)

        b. Thamu / dzithamu (canes, class 9/10)

        c. Thonga / dzithonga (sticks, class 9/10)

        d. Balaga / dzibalaga (poles, class 9/10)

        e. Basha / mabasha (poles for building houses, class 5/6)

        f. Mupfunda / mipfunda (fencing by branches of trees, class 3/4)

These nouns in (2) above may then not be considered as mass nouns.

Conclusion

From the discussion above the following nouns do not accept all these features and they should then not be considered as mass nouns: mugo; thamu; thonga; balaga; basha; and mupfunda.

Iron instruments

Iron instruments are objects made from iron that are used as a means of doing something. The following words in Tshivenda are associated with **iron instruments**:

(1)   a. Mbado (axe, class 9)

        b. Thavho (piercing instruments, class 9)

        c. Lunzhi (sharp long instruments, class 11)

        d. Pfumo (spear, class5)

        e. Tshezela (chisel, class 9)

        f. Tshaini (chain, class 9)

        g. Khono (key, class 9)

        h. Segere (sickle, class 9)

        i. Tshithavhane (weapon, class 7)

        j. Ganzhe (lock, class 5)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

Noun class

The following nouns may appear with two prefixes

(2)   a. Mbaḓo/ dzimbaḓo (axes, class 9/10)

          b. Thavho / dzithavho (piercing instruments, class 9/10)

          c. Lunzhi / vhunzhi (sharp long instruments, class 11/14)

          d. Pfumo / mapfumo (spears, class 5/6)

          e. Tshezela / dzitshezela (chisels, class 9/10)

          f. Tshaini /dzitshaini (chains, class 9/10)

          g. Khoṋo /dzikhoṋo (keys, class 9/10)

          h. Segere / dzisegere (sickles class, 9/10)

          i. Tshithavhane / zwithavhane (weapons class, 7/8)

          j. Ganzhe / maganzhe (locks class, 5/6)

These nouns in (1) above may then not be considered as mass nouns:

Conclusion

From the discussion above the following nouns do not accept all these features and they should then not be considered as mass nouns: mbaḓo; thavho; lunzhi; pfumo; tshezela; tshaini etc.

Leather instruments

Leather instruments are objects made from leather that are used as a means of doing something. The following nouns in Tshivenḓa are associated with leather instruments

(1)   a. Thambo (rope, class 9)

          b. Luzwa (rein, class 11)

          c. Tshimebi (leatherwhip, class 7)

          d. Tshienda tsha mukmba (leather shoe, class 7)

          e. Badzhi ya mukumba (leather jacket, class 9)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns

Morphological features

Noun class

The following nouns may appear with two prefixes:

(2)   a. Thambo / dzithambo (ropes, class 9/10)

          b. Luzwa / vhuzwa (reins, class 11/14)

          c. Tshimebi / zwimebi (leather whips, class 7/8)

          d. Tshienda tsha mukumba / zwienda zwa mukumba (leather shoes, class 7/8)

          e. Badziyamukumba / dzibadzhi dza mikumba (leather jackets, class 9/10)

These nouns in (2) above may then not be considered as mass nouns.

Conclusion

From the discussion above the following nouns do not accept all those features and they should then not be considered as mass nouns: thambo; luzwa; tshimebi etc.

3.4.3.9 Furniture

Furniture are tables, chairs, and other movable things that you need in a house or school or office etc. The following nouns in Tshivenḓa are associated within **furniture**.

(1)   a. Fanitshara (furniture, class 9)

          b. Tshidulo (chair, class 7)

          c. Ṱafula (table, class 5)

          d. Mmbete (bed, class 3)

          e. Khabodo (cupboard, class 9)

          f. Desike (desk, class 9)

          g. Sofa (sofa, class 5)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

Noun class

The following nouns may appear with two prefixes.

(2)   a. Fanitshara / dzifanitshara (funiture, class 9/10)

          b. Tshidulo /zwidulo (chairs, class 7/8)

          c. Ṱafula / maṱafula (tables, class 5/6)

          d. Mmbete / mimbete (beds, class 3/4)

          e. Khabodo / dzikhabodo (cupboards, class 9/10)

          f. Desike /dzidesike (desks, class 9/10)

          g. Sofa /masofa (sofas, class 5/6)

These nouns in (2) above may then not be considered as mass nouns.

Conclusion

The following nouns do not accept all those features and they should then not be considered mass nouns: fanitshara; sofa; desike; ṱafula; mmbete; khabodo; tshidulo etc.

3.4.4 Food

Food can be regarded as the things that are eaten by people and animals, or used by plants, so that they can live and grow. Focus in this study will be on food that is eaten by people.

3.4.4.1 Food General

The following nouns in Tshivenḓa are associated with **food: General**

(1)   a. Zwiḽiwa (food, class 8)

          b. Mbuvha (food for a journey, class 9)

          c. Muladza (left over food, class 3)

          d. Makoko (burnt food adhering to pot, class 6)

          e. Pfumi (food meant for a chief, class 9)

          f. Khongoḓoli (food meant for a woman who has just given birth, class 9)

          g. Dzumo (food at a funeral service, class 5)

The nouns in (1) above will now be investigated through certain morphological and syntactical features to see whether they are mass nouns.

Morphological features

a. Noun class

The nouns in (1a; 1g) may only appear with one noun class prefix and they may thus be regarded as the mass nouns. The following nouns (2) may appear with two prefixes and they may thus be regarded as the mass nouns.

(2)   a. Mbuvha /dzimbuvha (food for journay, class 9/10)

          b. Muladza / miladza (left over food, class 3/4)

          c. Goko / makoko (burn food adhering to pot, class 5/60

          d. Pfumi / dzipfumi (food meant for a chief, class 9/10)

          e. Khongoḓoli / dzikhongoḓoli (food meant for a women who has just given birth, class 9/10)

The nouns in (2) above appear with two prefixes and their meanings refer to the plurals. The are no differences in their meaning and they may thus be regarded as mass nouns.

b. Diminutive

The diminutive which appears with mass nouns has to refer to a small quantity. The suffix **–nyana** usually appear with this meaning.

(3)   a. Zwiḽiwanyana (a small quantity of food)

          b. Dzumonyana (a small quantity of food at funeral service)

          c. Mbuvhanyana (a small quantity of food for journey)

          d. Muladzanyana (a small quantity of food left over)

          e. Makokonyana (a small quantity of burnt food adhering to pot)

          f. Pfuminyana (a small quantity of food meant for a chief)

Syntactic features

a. Appearance with quantifiers

Numerals

Mass nouns may not appear with numerals

(4) *a. Zwiḽiwa zwivhili (two food)

    *b. Dzumo ḽithihi (one food at funeral service)

    *c. Mbuvha tharu (three food for journey)

    *d. Muladza muraru (three left-over food)

*e. Makoko maṇa (four burnt food adhering to pot)

*f. Pfumi mbili (two food meant for a chief)

Universal quantifier

Both count and mass nouns may appear with **-oṱhe**

(5) a. Zwiḽiwa zwoṱhe (all food)

b. Dzumo ḽoṱhe (all food at funeral service)

c. Mbuvha dzoṱhe (all food for a journey)

d. Muladza woṱhe (all left over food)

e. Makoko oṱhe (all burnt food adhering to pot)

f. Pfumi dzoṱhe (all food meant for a chief)

Quantifier adjectives

The adjectives stems **–nzhi** and **–ṱuku** may appear with mass and count nouns

a. Zwiḽiwa zwinzhi (a huge quantity of food)

Zwiḽiwa zwiṱuku (a small quantity of food)

b. Dzumo ḽinzhi (a huge quantity of food at funeral service)

Dzumo ḽiṱuku (a small quantity of food at funeral service)

c. Makoko manzhi (a huge quantity of burnt food adhering to pot)

Makoko maṱuku (a small quantity of burnt food adhering to pot)

d. Pfumi nnzhi (a huge quantity of food meant for a chief)

Pfumi ṱhukhu (a small quantity of food meant for a chief)

e. muladza munzhi (a huge quantity of food left over)

muladza muṱuku (a small quantity of food left over)

f. mbuvha nnzhi (a huge quantity of food for a journey)

mbuvha ṱhukhu (a small quantity of food for a journey)

b. Appearance as subjects reciprocal verbs

(7) a. Reciprocal verb with –ana

(i) With a plural prefixes Ma- and Zwi-

(a) Zwiḽiwa zwi a vangana

(The food become mixed up)

(b) Makoko a a welana

(The food adhering to pot falls on one another).

(ii) Reciprocal verbs with singular prefixes

a. Muladza u a welana

(Left-over food falls on one another.)

b. Mbuvha l a vangana

(The food for a journey become mixed up)

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic features and they should then be regarded as mass nouns:

(i) Nouns which appear with one prefix

zwiḽiwa and dzumo.

(ii) Nouns which appear with two prefixes and accept all the features of mass nouns

muladza; pfumi; mbuvha; muladza;makoko etc.

3.4.4.2 Food: Porridge

The following nouns in Venḓa are associated with **food: porridge**

(1) a. Vhuswa (porridge, class 14)

b. Mukapu (soft porridge, class3)

c. Thopi (porridge from pumpkin, class 9)

d. Munamba (porridge : maize and milk, class 3)

e. Mutuku (sour porridge, class 3)

f. Vhutete (porridge of fine maize meal, class 14)

g. Tshisese (porridge of small maize grains, class 7)

h. Mathuthu (stamp, class 6)

i. tshiunza (porridge for children, class 7)

The nouns in (1) above will now be investigated through certain morphological and syntactical features to see whether they are mass nouns

Morphological features

a. Noun class

The nouns in (1a; 1d; 1f; 1h;) may only appear with one noun class prefix and they may thus be regarded as the mass nouns.

The following nouns may appear with two noun class prefixes and they may be regarded as the mass nouns.

(2) a. Mukapu / mikapu (soft porridge, class 3/4)

    b. Thophi / dzithophi (porridgefrom pumpkins, class 9/10)

    (1) Mutuku / mituku (sour porridge, class 3/4)

    (2) Tshisese / zwisese (porridgeof finemaizemeals, class 7/8)

    (3) Tshiunza / zwiunza (porridge for children, class 7/8)

The nouns in (2) above appear with two noun class prefixes and their meanings do not change, they only refer to the plural and they should then be regarded as mass nouns.

b. Diminutive

The diminutive which appears with mass nouns has to refer to a small quantity. The suffix **–nyana** usually appear with this meaning.

(3) a. Vhuswanyana (a small quantity of porridge)

    b. Vhutetenyana (a small quantity of fine maize meal)

    c. Mathuthunyana (a small quantity of stamp)

    d. Munambanyana (a small quantity of porridge : maize and milk)

    e. Mutukunyana (a small quantity of sour porridge)

    f. Thophinyana (a small quantity of porridge from pumpkin)

    g. Tshisesenyana (a small quantity of porridge from small maize grains)

    h. Tshiunzanyana (a small quantity of porridge of a children)

    i. Mukapunyana (a small quantity of soft porridge)

Syntactic features

a. Appearance with quantifiers

Numerals

Mass nouns may not appear with numerals

(4) *a. Vhuswa vhuṋa (four porridge)

*b. Vhutete vhuraru (three fine maize meal)

*c. Mathuthu mavhili (two stamp)

*d. Munamba muraru (three porridge : maize and milk)

*e. Mutuku muraru (three sour porridge)

*f. Thophi ṱhanu (five porridge from pumpkin)

*g. Tshisese tshithihi (one porridge from small maize and grains)

*h. Tshiunza tshivhili (two porridge for children)

Universal quantifier

Both count and mass nouns may appear with **-oṱhe:**

(5) a. Vhuswa hoṱhe (all porridge)

b. Vhutete hoṱhe (all fine maize meal)

c. Mathuthu oṱhe (all stamp)

d. Mukapu woṱhe (all soft porridge)

e. Thophi yoṱhe (all porridge from maize and pumpkin)

f. Phuthu yoṱhe (all soft porridge)

g. Munamba woṱhe (all porridge : maize and milk)

h. Mutuku woṱhe (all sour porridge)

i. Tshiunza tshoṱhe (all porridge for children)

j. Tshisese tshoṱhe (all porridge of small maize grains)

Quantifier adjectives

The adjective stems **–nzhi** and **–ṱuku** may appear with mass and count nouns.

(6) a. Vhuswa vhunzhi (a huge quantity of porridge)

Vhuswa vhuṱuku (a small quantity of porridge)

b. Vhutete vhunzhi (a huge quantity of fine maize meal)

Vhutete vhuṱuku (a small quantity of fine maize meal)

c. Mathuthu manzhi (a huge quantity of stamp)

Mathuthu maṱuku (a small quantity of stamp)

d. Mukapu munzhi (a huge quantity of soft porridge)

Mukapu muṱuku (a small quantity of soft porridge)

   e. Thophi nnzhi (a huge quantity of porridge from pumpkin)

       Thophi ṱhuku (a small quantity of porridge from pumpkin)

   f. Phuthu nnzhi (a huge quantity of stoff porridge)

       Phuthu ṱhukhu (a small quantity of stoff porridge)

   g. Munamba munzhi (a huge quantity of porridge: maize and milk)

       Munamba muṱuku (a small quantity of porridge : maize and milk)

   h. Mutuku munzhi (a huge quantity of sour porridge)

       Mutuku muṱuku (a small quantity of sour porridge)

   i. Tshiunza tshinzhi (a huge quantity of porridge for children)

       Tshiunza tshiṱuku (a small quantity of porridge for children)

   j. Tshisese tshinzhi (a huge quantity of porridge of small maize grains)

       Tshisese tshiṱuku (a small quantity of porridge of small maize

       grains)

b. Appearance as subjects of reciprocal verbs.

7. Reciprocal verbs with **-ana**

(i) With a plural prefixes : Ma- and Vhu-

   a. Mathuthu a a ṱangana.

      (The stamp mixes)

   b. Vhutete vhu a welana

      (The porridge of fine maize meal falls on one another)

(ii) With a singular prefixes : Mu- and Tshi-

   a. Mutuku u a vangana

      (The sour porridge mixes)

   b. Tshisese tshi a welana

      (The porridge of small maize grains falls on one another).

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic features of mass nouns:

(i) Nouns which appear with one noun class prefix which accept features of mass nouns.

Vhuswa, mathuthu, tshiunza, munamba and vhutete.

(ii) Nouns which appear with two prefixes and accept the features of mass nouns.

Mukapu, mutuku, tshiunza, thophi etc.

3.4.4.3   Food : Maize

The following nouns in Venḓa are associated with **food : maize**

(1) a. Mpale (cobs of maize which hang from the roof class 3)

b. Ṱhuvhule (stamped maize with water, class 9)

c. Mavhele (maize, class 6)

Mavhele matswuku (yellow maize, class 6)

Mavhele matshena (white maize, class 6)

d. Khula (cob of maize, class 9)

e. Tshikoli (cob for roasting, class 7)

f.   Mugayo (crushed maize, class 3)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

a. Noun class

The following nouns in (1a;1c; 1f) may only appear with one noun class prefix and they may thus be regarded as mass nouns.

The following nouns may appear with two prefixes

(2) a. Tshikoli / zwikoli (cobs for roasting) class 7/8)

b. Khula /dzikhula (cobs of maize) class 9/10

These nouns may then not be considered as mass nouns.

b. Diminutive

The diminutive which appears with mass nouns has to refer to a small quantity. The suffix **–nyana** usually appear with this meaning:

(2) a. Mpalenyana (a small quantity of cobs of maize which hang from the roof.

 b. Mavhelenyana (a small quantity of maize)

   Mavhele matswukunyana (a small quantity of yellow maize)

   Mavhele matshenanyana (a small quantity of white maize)

 c. Thuvhulenyana (a small quantity of stamped maize with water)

 d. Mugayonyana (a small quantity of crushed maize)

Syntactic features

a. Appearance with quantifiers

Numerals

Mass nouns may not appear with numerals

(4) *a. Mpale miraru (three cobs of maize which hang from roof)

 *b. Mavhele mana (four maize)

 *c. Mavhele matswuku mana (four yellow maize)

 *d. Mavhele matshena mararu (three white maize)

 *e. Mugayo muraru (three crushed maize)

 *f. Thuvhule mbili (two stamped maize with water)

Universal quantifier

Both count and mass nouns may appear with **-othe**

(5) a. Mpale wothe (all cobs of maize which hang from roof)

 b. Mavhele othe (all maize)

   Mavhele matswuku othe (all yellow maize)

   Mavhele matshena othe (all white maize)

 c. Mugayo wothe (all crushed maize)

 d. Thuvhule yothe (all stamped maize with water)

Quantifier adjectives

The adjective stems **–nzhi** and **–tuku** may appear with mass and count nouns.

(6)   a. Mpale minzhi (a huge quantity of cobs of maize which hang from
            roof

            Mpalemituku (a small quantity of cobs of which hang from roof)

        b. Mavhele manzhi (a huge quantity of maize)

            Mavhele maṱuku (a small quantity of maize)

        c. Mugayo munzhi (a huge quantity of crushed maize)

            Mugayo muṱuku (a small quantity of crushed maize)

        d. Ṱhuvhule nnzhi (a huge quantity of stamped maize with water)

            Ṱhuvhule ṱhuku (a small quantity of stamped maize with water)

a. Appearance as subjects of reciprocal verbs

(7) Reciprocal verbs with –ana

(i) With a plural Ma-

    a. Mavhele a a vangana

        (The maize mix)

(ii) With singular prefixes

    a. Ṱhuvhule i a welana

        (The stamped maize with water falls on one another)

    b. Mugayo u a ṱangana

        (The crushed maize mixes)

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic
features and they should then be regarded as mass nouns:

Mass nouns which appear with one prefix, which accept features of mass nouns: Mavhele,
mpale, ṱhuvhule, mugayo, mavhele matswuku, mavhele matshena

The following nouns do not accept all those features and they should then not be
considered as mass nouns. tshikoli and khula.

3.4.4.4. Food : mixture

The following noun in Tshivenḓa is associated with food: mixture

(1) Tshidzimba (mixture of maize and beans) class 7

The noun in (1) above will now be investigated through certain morphological and syntactic features to see whether it is a mass noun

Morphological features
Nouns class
The noun in (1) above may appear with two prefixes
(2) Tshidzimba / zwidzimba (class 7/8 mixture of maize and beans)

In the case of (2) above, the mass noun is **tshidzimba**. This noun appears with the plural prefix Zwi- as in zwidzimba, there will be no difference in meaning. It refers to plural meanings.

b. Diminutive
The diminutive which appears with mass nouns has to refer to a small quantity. The suffix –nyana usually appear with this meaning.
(3) Tshidzimbanyana (a small quantity of mixture of beans and maize)

Syntactic features
a. Appearance with quantifiers
Numerals
Mass nouns may not appear with numerals
(4)* Tshidzimba tshiṱanu (five mixture of maize and beans)

Universal quantifier
Both count and mass nouns may not appear with **-oṱhe**:
(5) Tshidzimba tshoṱhe (all mixture of maize and beans)

Quantifier adjectives
The adjective stems –nzhi and –ṱuku may appear with mass and count nouns.
(6) Tshidzimba tshinzhi (a huge quantity of mixture of maize and beans
     Tshidzimba tshiṱuku (a small quantity of mixture of maize and beans)

b. Appearance as subjects of reciprocal verbs

7. Reciprocal verbs with **-ana**

Tshidzimba tshi a tangana.

(The mixture of beans and maize mixes)

Conclusion

From the discussion above, the following noun accepts all the morphological and syntactic features and it should then be regarded as mass noun: **tshidzimba**.

3.4.4.5   Food : Bread

The following words in Tshivenda are associated with **food : bread**.

(1) a. Vhurotho (wheat bread, class 14)

Vhurotho vhutshena (white bread, class 14)

Vhurotho ha mufumbu (brown bread , class 14/6)

b. Besikiti (biscuit, class 5)

b. Gwinya (fatcake, class 5)

c. Bantsi (bun, class 5)

d. Tshikontsi (scone, class 7)

e. Khekhe, (cake, class 9)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

Noun class

The following nouns may appear with two prefixes

(2) a. Vhurotho / marotho (wheat bread, class 14/6)

Vhurotho ha mufumbu / marotho a mufumbu (brown bread, class 14/6)

Vhurotho vhutshena / marotho matshena (white bread, class 14/6)

b. Besikiti / mabesikiti (biscuits, class 5/6)

c. Gwinya / magwinya (fatcakes, class 5/6)

d. Bantsi / mabantsi (buns, class 5/6)

e. Khekhe / dzikhekhe (scones, class 9/10)

f. Tshikontsi /zwikontsi (cakes, class 7/8)

These nouns may then not be considered as mass nouns.

Conclusion

The following nouns do not accept all those features and they should then not be considered as mass nouns. vhurotho; besikiti; gwinya; bantsi; khekhe; tshikontsi and tshidyangudyangu.

3.4.4.6   Food : Meat

The following nouns in Tshivenḓa are associated with **foods: meat**.

(1) a. Mutumbu (the body of a slaughtered animal, class 3)

b. Khadzingo (roasted piece of fat, class 9)

c. Mavhede (cooked of blood of an animal with fat, class 6)

d. Muṱuvha (share of meat of or slaughter, class 3)

e. Ṋama (meat, class 9)

f. Mukoki (biltong, class 3)

g. Mbabvu (rib, class 9)

h. Musumo (cut of meat for ancestors or chief, class 3)

i. Thindi (big piece of meat, class 9)

j. Thango (piece of cooked meat, class 9)

k. Ḓamu (meat from a cow's stomach, class 5)

l. Tshiswai (mixture of normal meat and intestines, class 7)

m. Tshireshi (meat from the lower lip of a cow, class 7)

n. Phatha (meat from the spinal cord of a cow, class 9)

o. Tshiakha (meat from the breast of a cow, class 7)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns:

Morphological features

a. Noun class

The nouns in (1b; 1d; 1e; 1h; 1k; 1o; 1m; 1n) may appear with two prefixes and they may thus be regarded as mass nouns.

The noun in (1c) may appear with one noun class prefix and it may thus be regarded as mass noun

(2) a. Khadzingo / dzikhadzingo (roasted pieces of fat, class 9)

    b. Mutuvha / mituvha (shares of meat for slaughterer, class 3/4)

    c. Nama / dzinama (meat, class 9/10)

    d. Musumo / misumo (cut of meat ancestors or chief, class 3/4)

    e. tshiswai / zwiswai (mixtures of normal meat and intestines, class 7/8)

    f. tshireshi / zwireshi (meat from the lower lips of cows, class 7/8)

    g. phatha / dziphatha (meat from the spinalcord of cows, class 9/10)

    h. tshiakha / zwiakha (meat from the breads of the cows, class 7/8)

The nouns above in (2) may appear with plural prefixes. There are no differences in their meanings. They refer to the plural meanings and they may thus be regarded as mass nouns.

The following nouns may appear with two prefixes

(2)   a. Mukoki / mikoki (biltongs, class 3/4).

        b. Mbabvu / dzimbabvu (ribs, class 9/10).

        c. Thindi / dzithindi (big pieces of meat, class 9/10).

        d. Thango / dzithango (pieces of cooked meat, class 9/10).

These nouns in (2) above may then not be considered as mass nouns.

Diminutive

The diminutive which appears with mass nouns has to refer to a small quantity. The suffix **–nyana** usually appear with this meaning:

(3) a. Mavhedenyana (a small quantity of cooked blood of animal with flat)

b. Khadzingonyana (a small quantity of roasted pieces of fat)

c. Muṱuvhanyana (a small quantity of share of meat for slaughterer)

d. Ṋamanyana (a small quantity of meat)

e. Musumonyana (a small quantity of meat for ancestors or chief)

f. Ḓamunyana (a small meat from a cow's stomach)

g. Tshiswainyana (a small quantity of mixture of normal meat and intestines)

h. Tshireshinyana (a small quantity of meat from the low lip of a cow)

i. Phathanyana (a small quantity of meat from the spinal cord of a cow)

j. Tshiakhanyana (a small quantity of meat from the breast of a cow)

Syntactic of features

a. Appearance with quantifiers

Numerals

Mass nouns may not appear with numerals

(4) *a. Mavhede mararu (three cooked blood of animal with fat)

　*b. Khadzingo tharu (three roasted pieces of fat)

　*c. Muṱuvha muṋa (four share of meat for slaughterer)

　*d. Ṋama nṋa (four meat)

　*e. Musumo muraru (three meat for ancestors or chief)

　*f. Ḓamu ḽiṱanu (five meat from a cow's stomach)

　*g. Tshiswai tshiṋa (four mixture of normal meat and intestines)

　*h. Tshireshi tshiraru (three meat from the lower lip of a cow)

　*i. Phatha tharu (three meat from the spinal card of a cow)

　*j. Tshiakha tshiraru (three meat from the breast of a cow)

Quantifier adjectives

The adjective stems **–nzhi** and **–ṱuku** may appear with mass and count nouns:

(5) a. 　Mavhede manzhi (a huge quantity of cooked blood of animal with fat)

　　　　Mavhede maṱuku (a small quantity of cooked of animal with fat)

　　b. 　Muṱuvha munzhi (a huge quantity of a share of meat for slaughterer)

　　　　Muṱuvha muṱuku (a small quantity of a share of meat for slaughterer)

　　c. 　Ṋama nnzhi (a huge quantity of meat)

Nama thukhu (a small quantity of meat)

d.   Musumo munzhi (a huge quantity of meat for ancestors)

Musumo mutuku (small quantity of meat for ancestors)

e.   Tshiswai tshinzhi (a huge quantity mixtures of normal meat and intestines)

Tshiswai tshituku (a small quantity mixture of normal meat and intestines)

f.   Khadzingo nnzhi (a huge quantity of roasted pieces of fat)

Khadzingo thukhu (a small quantity mixture of roasted pieces of fat)

g.   Phatha nnzhi (a huge quantity meat from the spinal cord of a cow)

Phatha thukhu (a small quantity meat from the spinal cord of a cow)

h.   Tshiakha tshinzhi (a huge quantity meat from the breast of a cow)

Tshiakha tshituku (a small quantity meat from the breast of a cow)

i.   Tshireshi tshinzhi (a huge quantity meat from the lower lip of a cow)

Tshireshi tshituku (a small quantity meat from the lower lip of a cow)

Universal quantifier

Both count and mass nouns may appear with **-othe:**

(6)   a. Mavhede othe (all cooked blood of animal with fat)

b. Khadzingo yothe (all roasted pieces of fat)

c. Mutuvha wothe (all share of meat for slaughterer)

d. Nama yothe (all meat)

e. Musumo wothe (all cut of meat for ancestors or chief)

f. Damu lothe (all meat from cow's stomach

g. Tshiswai tshothe (all mixture of normal meat and intestines)

h. Phatha yothe (all meat from the spinal cord of a cow)

i. Tshireshi tshothe (all meat from the lower lip of a cow)

j. Tshiakha tshothe (all meat from the breast of a cow)

b. Appearance as subjects of reciprocal verbs

Reciprocal verbs with –ana

- With the plural prefix Ma-

a. Mavhede a a tangana

(The cooked blood of an animal with fat mixes).

- With a singular prefixes

N̠ama i a elana

(The meat is the same)

b. Musumo u a vangana

   The meat for ancestors mixes

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic features of mass nouns.

(i) Noun which appears with one prefix and accept features of mass nouns: Mavhede.

(ii) Nouns which appear with two prefixes and accept features of mass nouns: khadzingo; n̠ama; mut̠uvha, musumo; phatha, tshiswai, tshireshi.

The following nouns do not accept all those features and they should then not be considered as mass nouns: mbabvu; mukoki; thindi; thango etc.

3.4.4.7   Food : Vegetables

The following nouns in Tshiven̠da are associated with vegetables

(1)   a. Miroho (vegetable, class 4)

       b. Bvani (watermelon, class 5)

       c. Makhaha (sorgum, class 6)

       d. Goroi (wheat, class9)

       e. N̠awa (bean, class 9)

       f. Mukusule (dry vegetable, class 3)

       g. Nyala (onion, class 9)

       h. Fhuri (pumpkin, class 5)

       i. Dongo (vegetables cooked without salt, class 5)

       j. Tshinange (a mixture of vegetables, class 7)

       k. Dovhi (a mixture of vegetable and peanuts, class 5)

l. Masheleni (roasted pumpkin seeds, class 6)

m. Khavhishi (cabbage, class 9)

n. Tshipinishi (spinach, class 7)

o. Mutshaini (chinese spinach, class 3)

p. Phiriphiri (pepper, class 9)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

a. Noun class

The nouns in (1c; 1d; 1i; 1j; 1k; 1p) may appear with one noun class prefix and they may thus be regarded as mass nouns.

The following nouns may appear with two prefixes

(2)   a. Bvani / mabvani (watermelons class 5/6)

b. Nawa / dzinawa (beans, class 9/10)

c. Nyala (onion) /dzinyala (onions, class 9/10)

d. Fhuri (pumpkin) / mafhuri (pumpkins, class 5/6)

e. Khavhishi (cabbage) / dzikhavhishi (cabbages, class 9/10)

f. Tshipinisi (spinach) / zwipinisi (spinaches, class 7/8)

g. Mutshaini (chinese spinach) / mitshaini (chinese spinaches, class 3/4)

h. Muroho / miroho (vegetables, class 3/4)

These nouns may then not be considered as mass nouns.

b. Diminutive

The diminutive which appears with mass nouns has to refer to a small quantity. The suffix **–nyana** usually appear with this meaning:

(3)   a. Makhahanyana (a small quantity of sorgum)

b. Goroinyana (a small quantity of wheat)

c. Mukusulenyana (a small quantity of dry vegetable)

d. Dongonyana (a small quantity of vegetables cooked without salt)

e. Tshinangenyana (a small quantity of a mixture of vegetables)

    f. Dovhinyana (a small quantity of mixture of vegetable and peanuts)

    g. Masheleninyana (a small roasted pumpkin seeds)

Syntactic features

a. Appearance with quantifiers

Numerals

Mass nouns may not appear with numerals

(4) *a. Makhaha mavhili (two sorgum)

    *b. Masheleni maṱanu (five roasted pumpkin)

    *c. Goroi nṋa (four wheat)

    *d. Dongo mbili (two vegetables cooked without salt)

    *e. Tshinange tshivhili (two mixture of vegetables)

    *f. Dovhi ḽiraru (three mixture of vegetable and peanuts)

    *g. Mukusule muraru (three dry vegetables)

Universal quantifier

Both count and mass nouns may appear with **-othe**:

(5)   a. Makhaha oṱhe (all sorgum)

    b. Masheleni oṱhe (all roasted pumpkin)

    c. Goroi yoṱhe (all wheat)

    d. Dongo ḽoṱhe (all vegetables cooked without salt)

    e. Tshinange tshoṱhe (all mixture of vegetables)

    f. Dovhi ḽoṱhe (all mixture of vegetables and peanuts)

    g. Mukusule woṱhe (all dry vegetables)

Quantifiers adjectives

The adjectives stems **–nzhi** and **–ṱuku** may appear with mass and count nouns.

(6)   a. Makhaha manzhi (a huge quantity of sorgum)

        Makhaha maṱuku (a small quantity of sorgum)

    b. Masheleni manzhi (a huge quantity of roasted pumpkin seeds)

        Masheleni maṱuku (a small quantity of roasted pumpkin seeds)

    c. Goroi nnzhi (a huge quantity of wheat)

        Goroi ṱhukhu (a small quantity of wheat)

    d. Dongo linzhi (a huge quantity of vegetables cooked without salt)

       Dongo lituku (a small quantity of vegetables cooked without salt)

    e. Tshinange tshinzhi (a huge quantity of a mixture of vegetables)

       Tshinange tshituku (a small quantity of a mixture of vegetables)

    f. Mukusule munzhi (a huge quantity of dried vegetables)

      Mukusule mutuku (a small quantity of dried vegetables)

    g. Dovhi linzhi (a huge quantity of mixture of vegetable and peanuts)

      Dovhi lituku (a small quantity of mixture of vegetable and peanuts)

b. Appearance as subjects of reciprocal verbs

(7) Reciprocal verbs with –ana

(i) With a plural prefix Ma-

    a. Makhaha a avangana.

      (The sorgum mixes).

    b. Masheleni a a tangana.

      (The roasted pumpkin seeds mix).

(ii) With singular prefixes

    a. Goroi i a welana.

      (The wheat falls on one another).

    b. Mukusule u a elana.

      (The dried vegetable is the same).

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic features and they should then be regarded as mass nouns:

(i) Nouns which appear with one noun prefix and accept features of mass nouns:

Makhaha, masheleni, goroi, dovhi, dongo.

(ii) Nouns which appear with two prefixes and accept features of mass nouns:

    Mukusule.

3.4.4.8   Liquid

Liquid is defined as a substance which is neither a gas nor a solid, flows easily and takes the same share as its container

Intoxicating

Intoxicating liquid which makes one drunk if one has too much.

Tshivenda beer

The following nouns in Tshivenḓa are associated with **Tshivenḓa beer**.

(1)   a. Mahafhe (Tshivenḓa beer, class 6)

b. Tshikanḓamalembe (beer meant to motivate helpers before they start a job, class 7)

c. Tshioroso (beer for helpers, when the work is finished, class 7)

d. Muthetshelo (beer for tasters, class 3)

e. Mutakulo (beer for boys and girl, class 3)

f. Musinḓelo (beer for those who helped in its brewing, class 3)

g. Pfumbavhulo (beer for chiefs and headman, class 9)

h. Mukumbi (maroela beer, class 3)

i. Lutanda (fermented maroela beer, class 11)

j. Mabundu (thin porridge drink, class 6)

k. Muvanya (watery beer made of sorghum and sugar, class 3)

l. Mahumbu (real mabundu, class 6)

m. Maswuru (Venḓa beer, class 6)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns:

Morphological features

a. Noun class

The nouns in (1a; 1i; 1l; 1m) may only appear with one noun class prefix, i.e. the prefix Ma- of class 6 and they may thus be regarded as mass nouns.

The following nouns may appear within two prefixes

(2)   a. Tshikandamalembe/zwikandamalembe (beer meant to motivate helpers before they start a job, class 7/8)

b. Tshioroso/zwioroso (beer for helpers, when the work is finished, class 7/8)

c. Muthetshelo/mithetshelo (beer for tasters, class 3/4)

d. Mutakulo/mitakulo (beer for girls and boys, class 3/4)

e. Musindelo/misindelo (beer for those who helped in its brewing, class 3/4)

f. Pfumbavhulo /dzipfumbavhulo (beer for chief and headman, class 9/10)

g. Mukumbi/mikumbi (maroelabeer, class 3/4)

h. Muvanya/mivanya (watery beer made of sorghum and sugar, class 3/4)

In the case of (2) above all the nouns are the mass nouns. When the above nouns appear with the plural prefixes there will be no differences in their meanings. Their plural prefixes refer to the plural only and they may thus be regarded as the mass nouns.

b. Diminutive

The diminutive which appears with mass nouns has to refer to a small quantity. The suffix **–nyana** usually appear with this meaning.

(3)   a. Mahafhenyana (a small quantity of Venda beer)

b. Tshikandamalembenyana (a small quantity of beer meant to motivate helpers before they start a job.

c. Tshiorosonyana (a small quantity of beer for helpers, when the work is finished

d. Muthetshelonyana (a small quantity of beer for tasters)

e. Mutakulonyana (a small quantity of beer for boys and girls)

f. Musindelonyana (a small quantity of beer for those who helped in its brewing

g. Pfumbavhulonyana (a small quantity of beer for chiefs and headman)

h. Mukumbinyana (a small quantity of maroela beer)

i. Lutandanyana (a small quantity of fermented maroela beer)

j. Mabundunyana (a small quantity of thin porridge drink)

k. Muvanyanyana (a small quantity of watery beer)

l. Maswurunyana (a small quantity of Venda beer)

Syntactic features

a. Appearance with quantifiers

Numerals

Mass nouns may not appear with **numerals:**

(4) *a. Mahafhe mavhili (two Tshivenḓa beer)

  *b. Muthetshelo muthihi (one beer for tasters)

  *c. Mutakulo muraru (three beer for boys and girls)

  *d. Musinḓelo muṇa (four beer for those who helped in its brewing)

  *e. Pfumbavhulo tharu (three beer for chiefs and headman)

  *f. Mukumbi muraru (three maroela beer)

  *g. Lutanda luṇa (four fermented maroela beer)

  *h. Muvanya muraru (three watery beer)

  *i. Mabundu maṇa (four thin porridge drink)

  *j. Maswuru mararu (three Tshivenḓa beer)

Universal quantifiers

Both count and mass nouns may appear with **-oṱhe**:

(5) a. Mahafhe oṱhe (all Tshivenḓa beer)

  b. Muthetshelo woṱhe (all beer for tasters)

  c. Mutakulo woṱhe (all beer for boys and girls)

  d. Musinḓelo woṱhe (all beer for those who helped in its brewing)

  e. Pfumbavhulo yoṱhe (all beer for chiefs and headman)

  f. Mukumbi woṱhe (all maroela beer)

  g. Lutanda lwoṱhe (all fermented maroela beer)

  h. Muvanya woṱhe (all watery beer)

  i. Mabundu oṱhe (all thin porridge drink)

  j. Maswuru oṱhe (three Venḓa beer)

Quantifier adjectives

The adjective stems **–nzhi** and **–ṱuku** may appear with mass and count nouns:

(6) a. Mahafhe manzhi (a huge quantity of Venḓa beer)

   Mahafhe maṱuku (a small quantity of Venḓa beer)

  b. Muthetshelo munzhi (a huge quantity of beer for tasters)

Muthetshelo muṱuku (a small quantity of beer for tasters)

c.   Mutakulo munzhi (a huge quantity of beer for girls and boys)

Mutakulo muṱuku (a small quantity of beer for girls and boys)

d.   Musiṇḓelo munzhi (a huge quantity of beer for those who helped in its brewing)

Musiṇḓelo muṱuku (a small quantity of beer for those who helped in its brewing)

e.   Pfumbavhulo nnzhi (a huge quantity of beer for chiefs and headman)

Pfumbavhulo ṱhukhu (a small quantity of beer for chiefs and headman)

f.   Mukumbi munzhi (a huge quantity of maroela beer)

Mukumbi muṱuku (a small quantity of maroela beer)

g.   Lutanda lunzhi (a huge quantity of fermented maroela beer)

Lutanda luṱuku (a small quantity of fermented maroela beer)

h.   Muvanya munzhi (a huge quantity of watery beer)

Muvanya muṱuku (a small quantity of watery beer)

i.   Mabundu manzhi (a huge quantity of thin porridge drink)

Mabundu maṱuku (a small quantity of thin porridge drink)

j.   Maswuru manzhi (a huge quantity of Venḓa beer)

Maswuru maṱuku (a small quantity of Venḓa beer)

b. Appearance as subjects of reciprocal verbs

(7) Reciprocal verbs with -ana

(i) With a plura prefix Ma-

a.   Mahafhe a a welana

(The Tshivenḓa beer falls on one another)

b.   Maswuru a vangana

(The Tshivenḓa beer mixes).

(ii) With a singular prefixes

a.   Muthetshelo u a elana

(The beer for tasters is the same).

b.   Mukumbi u a welana.

(The maroela beer falls on one another).

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic features of mass nouns.

(i) Nouns which appear with one noun class prefix and accept features of mass nouns: mabundu, mahafhe, maswuru, lutanda.

(ii) Nouns which appear with two prefixes and accept features of mass nouns: muvanya, musiṋḓelo,mutakulo, muthetshelo, tshioroso, lutanda, and pfumbavhulo.

3.4.4.9   Liquor

Liquor means a strong alcoholic drink and is produced by distillation rather than fermentation.

The following nouns in Tshivenḓa are associated with **liquor**.

(1) a   Halwa (liquor, class 14)

b. Biya (beer, class 9)

c. Waini (wine, class 9)

Waini tswuku (red wine, class 9)

Waini tshena (white wine, class 9)

d. Buranndi (brandy, class 9)

e. Thothotho (home made brandy, class 9)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

a. Noun class

The nouns in (1) above may appear with two prefixes:

(2) a. Halwa / mahalwa (liquor, class 14/6)

b. Biya / dzibiya (beer, class 9/10)

c. Waini / dziwaini (wine, class 9/10)

d. Burandi / dziburandi (brandy, class 9/10

e. Thothotho /dzithothotho (home made brandy, clas 9/10)

In the case of (2a) above the mass noun is **halwa**, when this noun appears with the plural prefix Ma- as in **mahalwa**, there will be a difference in meaning, i.e. thus plural noun **mahalwa** refers to different kinds of liquor.

In the nouns of (2b)-2e) above, all the nouns are the mass nouns. When these nouns appear with plural prefixes above, there will be no differences in meanings. The prefixes refer to plural meanings and also liquid liquor

c.   Diminutive

The diminutive which appear with mass nouns has to refer to a small quantity. The suffix **–nyana** usually appear with this meaning.

(3) a. Halwanyana (a small quantity of liquor)

   b. Waininyana (a small quantity of wine)

   c. Burandinyana (a small quantity of brandy)

   d. Thothothonyana (a small quantity of home made brandy)

Syntactic featiures

a. Appearance with quantifiers

Numerals

Mass nouns may not appear with **numerals.**

(4)   *a. Halwa vhuraru (three liquors)

   *b. Waini tharu (three wines)

   *c. Burandi mbili (two brandies)

   *d. Thothotho tharu (three home made brandies)

Universal quantifier

Both count and mass nouns may appear with **-othe:**

(5)   a. Halwa hothe (all liquor)

   b. Waini yothe (all wine)

   c. Burandi yothe (all brandy)

   d. Thotho yothe (all home made brandy)

Quantifier adjectives

The adjective stems **–nzhi** and **–tuku** may appear with mass and count nouns:

(6)   a. Halwa vhunzhi (a huge quantity of liquor)

            Halwa vhuṱuku (a small quantity of liquor)

        b. Waini nnzhi (a huge quantity of wine)

            Waini ṱhukhu (a small quantity of wine)

        c. Burandi nnzhi (a huge quantity of brandy)

            Burandi ṱhukhu (a small quantity of brandy)

        d. Thothotho nnzhi (a huge quantity of home made brandy)

            Thothotho ṱhukhu (a small quantity of home made brandy)

b. Appearance as subjects of reciprocal verbs

(7) a. Reciprocal verbs with -ana

With singular prefixes

    a. Halwa vhu a ṱangana.

        (The liquor mixes)

    b. Waini i a vangana.

        (The wine mixes)

    c. Thothotho i a welana.

        (The home made brandy falls on one another).

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic features: they should then be regarded as mass nouns: halwa, waini, burandi and thothotho.

3.4.4.10 Non-intoxicating liquid

Non- intoxiicating liquid is a liquid which does not make one drunk if one has taken too much.

The following nouns in Tshivenḓa are associated with non-intoxicating liquid

(1)   a. Nyamunaithi (cold drink, class 9)

       b. Makhaṱha (thick milk, class 6)

       c. Mafhi (milk, class 6)

       d. Tshithuvhi (milk from second day to fourth day, class 7)

       e. Mikando (human milk, class 4)

       f. Buvha (skimmed milk, class 5)

       g. Luvhisi (fresh milk, class7)

       i. Murogodzho (milk which boys milk in mouth, class 3)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

a. noun class

The nouns in (1b; 1c; 1g) may only appear with one noun class prefixes and they may thus be regarded as mass nouns.

The following nouns may appear with two prefixes and they may thus be regarded as mass nouns:

(2)   a. Nyamunaithi/dzinyamunaithi (cold drinks, class 9/10)

       b. Tshithuvhi/zwithuvhi (milk from second to fourth day, class 7/8)

       c. Mukando/mikando (human milk, class 3/4)

       d. Buvha/mabuvha (skimmed milk, class 5/6)

       e. Murogodzho/mirogodzho (milk which boys milk in mouth, class 3/4)

The nouns in (2) above are mass nouns. When these nouns appear with plural prefixes as above there will be no differences in meanings. The plural prefixes above refer to the plural meanings.

b. Diminutive

The diminutive which appears with mass nouns has to refer to a small quantity. The suffix **–nyana** usually appear with this meaning.

(3)   a. Nyamunaithinyana (a small quantity of coldrink)

       b. Makhaṱhanyana (a small quantity of thick milk)

c. Mafhinyana. (a small quantity of milllk)

d. Tshithuvhinyana (a small quantity of milk from second day to fourth day)

e. Mikandonyana (a small quantity of human milk)

f. Buvhanyana (a small quantity of skimmed milk)

g. Murogodzhonyana (a small quantity of milk which boys milk in mouth)

h. Luvhisinyana (a small quantity of fresh milk)

Syntactic features

a. Appearance with quantifiers

Numerals

Mass nouns may not appear with **numerals:**

(4)　*a.　Nyamunaithi tharu (three coldrinks)

　　　*b.　Makhaṱha maṋa (four thick milks)

　　　*c.　Mafhi mavhili (two milks)

　　　*d.　Tshithuvhi tshiraru (three milk from second day to fourth days)

　　　*e.　Mikando miraru (three human milks)

　　　*f.　Buvha ḽithihi (one skimmed milks)

　　　*g.　Murongodzho muraru (three milk which boys milk in mouths)

　　　*h.　Luvhisi luraru (three fresh milks)

Universal quantifier

Both count and mass nouns may appear with **-oṱhe**

(5)　a.　Nyamunaithi woṱhe (all coldrick)

　　　b.　Makhaṱha oṱhe (all thick milk)

　　　c.　Mafhi oṱhe (all milk)

　　　d.　Tshithuvhi tshoṱhe (all milk from second to fourth day)

　　　e.　Mikando yoṱhe (all human milk)

　　　f.　Buvha ḽoṱhe (all skimmed milk)

　　　g.　Murogodzho woṱhe (all milk which boys milk in mouth)

　　　h.　Luvhisi lwoṱhe (all fresh milk)

Quantifier adjectives

The adjective stems **–nzhi** and **–ṱuku** may appear with mass and count nouns.

(6) a. Nyamunaithi munzhi (a huge quantity of cold drink)

Nyamunaithi muṱuku (a small quantity of cold drink)

b. Makhaṱha manzhi (a huge quantity of thick milk)

Makhaṱha maṱuku (a small quantity of thick milk)

c. Mafhi manzhi (a huge quantity of milk)

Mafhi maṱuku (a small quantity of milk)

d. Tshithuvhi tshinzhi (a huge quantity of milk from second day) to fourth day)

Tshithuvhi tshiṱuku (a small quantity of milk from second day) to fourth day)

e. Mikando minzhi (a huge quantity of human milk)

Mikando miṱuku (a small quantity of human milk)

f. Buvha linzhi (a huge quantity of skimmed milk)

Buvha liṱuku (a small quantity of skimmed milk)

g. Murogodzho munzhi (a huge quantity of milk which boys milk in mouth)

h. Murogodzho muṱuku (a small quantity of of milk which boys milk in mouth)

i. Luvhisi lunzhi (a huge quantity of fresh milk)

Luvhisi luṱuku (a small quantity of fresh milk)

b. Appearance as subjects of reciprocal verbs

(7) Reciprocal verbs with -ana

(i) With a plural prefix Ma-

a. Mafhi a a welana.

(The milk falls on one another)

b. Makhaṱha a ṱangana

(The thick milk mixes).

(ii) With singular prefixes

a. Luvhisi lu a vangana

(The fresh milk mixes)

b. Nyamunaithi u a elana

(The colddrink is the same).

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic features of mass nouns.

(i) Nouns which appear with one prefix and accept features of mass nouns

makhaṱha, mafhi, mikando and luvhisi

(ii) Nouns which appear with two prefixes and accept features of mass nouns.

tshithuvhi, buvha, murogodzho, nyamunaithi

3.4.5   Body parts

3.4.5.1   Body parts External

The following nouns are associated with body parts: External

(1) a. Muvhili (body, class 3)

b. Mutsinga (neck, class 3)

c. Haḓa (shoulder, class 5)

d. Khana (chest, class 9)

e.   Ḓamu (breast of a woman, class 5)

f.   Shaho (bighip, class 5)

g. Thoho (head, class 9)

h. Tshidikadika (a dam's apple, class 7)

i.   Thumbu (stomach, class 9)

j.   Mulanzhe (leg, class 3)

k. Lwayo (foot,class 11)

l.   Gona (knee, class 5)

m. Tshanḓa (hand , class 7)

n. Mukulo (throat, class 3)

o. Iṱo (eye, class 5)

p. Muṱana (back, class 3)

q. Tshiḽelo (stomach, class 7)

r. Lukanda (skin, class 11)

s. Dzhende (testicle, class 5)

t. Tshitungulo (penis, class 7)

u. Tshivhunu (anus, class 7)

v. Maḓasi (male genitals, class 6)

w. Luvhabvu (rib, class 11)

The nouns in (1) will be now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

a. Noun class

The noun in (1v) may only appear with one noun class prefix and it may thus be regarded as mass noun.

The following nouns in (1) above, may appear with two prefixes:

(2) a. Muvhili / mivhili (bodies, class 3/4)

b. Mutsinga / mitsinga (necks, class 3/4)

c. Haḓa / mahaḓa (shoulders, class 5/6)

d. Khana / dzikhana (chests, class 9/10)

e.   Ḓamu / maḓamu (breasts, class 5/6)

f. Shaho / maraho (bighips, class 5/6)

g. Thoho /dziṱhoho (heads, class 9/10)

h. Thumbu / dzithumbu (stomachs, class 9/10)

i. Lwayo / vhunayo (feet, class 11/14)

j. Gona / magona (knees, class 5/6)

k. Tshanḓa / zwanḓa (hands, class 7/8)

l. Mukulo / mikulo (throats, class 3/4)

m. Iṱo / maṱo (eye,) class 5/6

n. Muṱana / miṱana (backs, class 3/4)

o. Tshiḽelo / zwiḽelo (stomach,) class 7/8

p. Lukanda / vhukanda (skins, class 11/14)

q. Dzhende (testicle) / matshende (testicles) class 5/6

r. Tshitungulo /zwitungulo (penises, class 7/8)

s. Tshivhunu /zwivhunu (anuses, class7/8)

t. Luvhabvu / dzimbabvu (ribs, class 9/10)

These nouns may then not be considered as mass noun.

b. Diminutive

The diminutive which appears with mass nouns has to refer to a small quantity. The suffix **–nyana** usually appear with this meaning.

(3) Maḓasinyana (small quantity of male genitals)

Syntactic features

a. Appearance with quantifiers

Numerals

Mass nouns may not appear with **numerals**

(4)* Maḓasi mararu (three male genitals)

Universal quantifier

Both count and mass nouns may appear with **-oṱhe:**

Maḓasi oṱhe (all male genitals)

Quantifier adjectives

The adjective stems **–nzhi** and **–ṱuku** may appear with mass and count nouns:

(6) Maḓasi manzhi (many quantity of male genitals)

Maḓasi maṱuku (a small quantity of male genitals)

b. Appearance as subjects of reciprocal verbs

With suffix **-ana**

(7) Maḓasi a ṱangana

(The male genitals mix)

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic features and it should then be regarded as mass noun: maḓasi.

The following nouns do not accept all those features and they should then not be considered as mass nouns: muvhili; mutshinga; shaḓa; khana; ḓamu; shaho; ṱhoho; thumbu; mulenzhe; gona; tshanḓa etc.

3.4.5.2   Body parts (internal)

The following nouns in Tshivenda are associated with body, **parts: internal**

(1) a. Vhuluvhi (brain, class 14)

    b. Fhafhu (lung, class 5)

    c. Mbilu (heart, class 9)

    d. Lumende (milt, class 11)

    e. Mala (intestines, class 6)

    f. Mbumbelo (womb, class 9)

    g. Musipha (muscle, class 3)

    h. Luganu (thigh muscle, class 11)

    i. Lutsinga (vein, class 11)

    j. Luṱaledzi (nerve, class 11)

    k. Mukulo (throat, class 3)

    l. Gulokulo (gullet, class 5)

    m. Tshivhindi (liver, class 7)

    n. Tshilagu (appendix, class 7)

    o. Lula (small interstine, class 11)

    p. Dundelo (bladder, class 5)

    q. Shambo (bone, class 5)

    r. Malofha (blood, class 6)

    s. Tswio (kidney, class 9)

The nouns in (1) above will now be investgated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

a. Noun class

The nouns in (1a; 1e;) may only appear with one noun class prefix and they may thus be regarded as massnouns

(2) a. Fhafhu / mafhafhu (lungs, class 5/6)

b. Mbilu / dzimbilu (hearts, class 9/10)

c. Lumende / vhumende (milts, class 11/14)

c. Mbumbelo / dzimbumbelo (wombs, class 6/10)

d. Musipha / misipha (muscles, class3/4)

e. Luganu / vhuganuni (thigh muscles, class 11/14)

f. Lutsinga / vhutsinga (veins, class 11/14)

g. Lutaledzi /vhutaledzi (nerves, class 11/14)

h. Mukulo / mikulo (throats, class 3/4)

i. Gulokulo / magulokulo (gullets, class 5/6)

j. Tshivhindi /zwivhindi (livers, class 7/8)

k. Tshilagu /zwilagu (appendixes, class 7/8)

l. Lula / mala (interstines, class 11/6)

m. Dundelo / madundelo (bladders, class 5/6)

n. Shambo / marambo (bones, class 5/6)

o. Tswio /dzitswio (kidneys, class 9/10)

These nouns may then not be considered as mass nouns

b. Diminutive

The diminutive which appears with mass nouns has to refer to a small quantity. The suffix **–nyana** usually appear with this meaning.

(3) a. Vhuluvhinyana (a small quantity of brain)

b. Malofhanyana (a small quantity of blood)

Syntactic features

a. Appearance with quantifiers

Numerals

Mass nouns may not appear with **numerals**

(4) *a. Vhuluvhi vhuraru (three brains)

*b. Malofha mavhili (two bloods)

Universal quantifiers

Both count and mass nouns may appear with **-othe**:

(5) a. Malofha othe (all blood)

b. Vhuluvhi hothe (all brain)

Quantifier adjectives

The adjective stems **–nzhi** and **–ṱuku** may appear with mass and count nouns:

(6) a. Malofha manzhi (a huge quantity of blood)

   Malofha maṱuku (a small quantity of blood)

 b. Maluvhi manzhi (a huge quantity of brain)

   Maluvhi maṱuku (a small quantity of brain)

b. Appearance as subject of reciprocal verbs

(7) Reciprocal verbs with -ana

With plural prefixes Ma- and Vhu-

   a. Malofha a vangana

    (The blood mixed up)

   b. Vhuluvhi vhu a ṱangana

    (The brain mixes)

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic features of mass nouns:

Nouns which appear with one prefix and accept features of mass nouns:
malofha and vhuluvhi

The following nouns do not accept all these features and they should then not be considered as mass nouns: Fhafhu; mbilu; tshiḽelo; mbumbelo; musipha; luganu; mukulo; tshivhindi; tshilagu etc.

3.4.5.3   Ṱhoho (head)

The following nouns in venḓa are associated with **head**.

(1) a. Ṱhoho (head, class 9)

  b. Tshifhaṱuwo (face, class7)

  c. Phanḓa (forehead, class 9)

d. Tshitiko (back of the head, class 7)

e. Mavhudzi (hair, class 6)

f. Bonze (longhair, class 5)

g. Tshikosi (black of head, class 9)

h. Ngwasa (uncombedhair, class 9)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

a. Noun class

The following nouns may appear with two noun class prefixes:

(2) a. Thoho / dzithoho (heads, class 9/10)

b. Tshifhatuwo / zwifhatuwo (faces, class 7/8)

c. Phanda / dziphanda (foreheads, class 9/10)

d. Tshitiko / zwitiko (back of the heads, class 7/8)

e. Livhudzi / mavhudzi (hair, class 5/6)

f. Bonze / mabonze (longhair, class 5/6)

g. Tshikosi / zwikosi (back of head, class 5/6)

h. Ngwasa / dzingwasa (uncombed hair, class 9/10)

These nouns in (2) above may then not be considered as mass nouns.

3.4.5.4   Tshifhatuwo (face)

The following nouns in Tshivenda are associated with **face**:

(1) a. Ito (eye, class 5)

b. Lutaha (cheek, class 11)

c. Ningo (nose, class 9)

d. Mulomo (mouth, class 3)

e. Tshitovhosakhombe (lowewrlip beard, class 7

f. Tshikuma (fore heard, class 7)

g. Ndevhe (ear, class 9)

h. Tshitefu (chin, class 7)

I. Ndebvu (beard, class 9)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

a. Noun class

The following nouns in (1) above may appear with two prefixes:

(2) a. Iṱo / maṱo (eyes, class 5/6)

b. Luṱaha / vhuṱaha (cheeks, class 11/14)

c. Ningo /dziningo (noses, class 9/10)

d. Mulomo / milomo (mouths, class 3/4)

e. Tshiṱovhosakhombe / zwiṱovhosakhombe (lowerlip beards, class 7/8)

f. Tshikuma / zwikuma (foreheads, class 7/8)

g. Ṋdevhe / dziṋdevhe (ears, class 9/10)

h. Tshiṱefu/zwiṱefu (chins, class 7/8)

i. Ndebvu/dzindebvu (beard, class 9/10)

The nouns in (2) above may then not be considered as mass nouns

Conclusion

The following nouns do not accept all those features and they should then not be considered as mass nouns:

Tshikuma; ṋdevhe; tshiṱefu; ndebvu; iṱo; luṱaha; ningo; mulomo etc.

3.4.5.5   Iṱo (eye)

The following nouns in Tshivenḓa are associated with **eye**:

(1) a. Tsie (eye-lashes, class 9)

b. Tshanga (pupil, class 9)

c. Tshiombe (eye-bwown, class 7)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

a. Nouns class

The following nouns in (1) above may appear with two prefixes

(2) a Tsie / dzitsie (eye-lashes, class 9/10)

    b. Tshanga /dzitshanga (pupil, class 9/10)

    c. Tshiombe / zwiombe (eye-brows, class 7/8)

These nouns may then not be considered as mass nouns.

Conclusion

The following nouns do not accept all those features and they should then not be considered as mass nouns: tsie; tshanga and tshiombe.

3.4.5.6   Mulomo (mouth)

Mouth refers to the opening through which food is taken into the body. The following nouns are associated with **mouth**.

(1)a. Ino (tooth, class 5)

    b. Lirinini (gum, class 5)

    c. Maphinde (uneven teeth, class 6)

    d. Madzeu (molars, class 6)

    e. Meme (lip, class 9)

    f. Lulimi (tongue, class 11)

    g. Vhende (gap between extracted teeth, class 5)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns:

Morphological features

Noun class

The following nouns in (1) above may appear with two profixes:

(2) a. Ino / mano (teeth, class 5/6)

b. Ḽirinini / marinini (gums, class 5/6

c. Ḽiphinde / maphinde (uneventeeth, class 5/6)

d. Ḽidzeu / madzeu (molars, class 5/6)

e. Meme / dzimeme (lips, class 9/10)

f. Lulimi / ndimi (tongues, class 11/10)

g. Vhende / mavhende (gaps between extracted teeth, class 5/6)

These nouns may then not be considered as mass nouns.

Conclusion

The following nouns do not accept all those features and they should then not be considered as mass nouns: iṋo; ḽirinini; maphinde; madzeu; meme; lulimi and vhende.

3.4.5.7   Tshanḓa (hand)

The following nouns in Tshivenḓa are associated with hand:

(1) a. Tshanḓa (hand, class 7)

b. Luṋala (nail, class 11)

c. Gunwe (thumb, class 5)

d. Tshinwanwane (little finger, class 7)

e. Luvhando (hand palm, class 11)

f. Munwe (finger, class 3)

g. Musumbavhaloi, class 3)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features
Noun class

The following nouns in (1) above may appear with two prefixes:

(2) a. Tshanḓa / zwanḓa (hands, class 7/8)

b. Luṋala / vhuṋala (nails, class 11/14)

c. Gunwe / makunwe (thumbs, class 5/6)

    d. Tshinwanwane / zwinwanwane (little fingers, class 7/8)

    e. Luvhando / mbando (handpalms, class 11/10)

    f. Munwe / minwe (fingers, class 3/4)

    g. Musumbavhaloi / misumbavhaloi (fore fingers, class 3/4)

These nouns may then not be considered as mass nouns.

Conclusion

The following nouns do not accept all those features and they should then not be considered as mass nouns: tshanda, lunala, gunwe, luvhando, munwe, musumbavhaloi etc.

3.4.5.8   Tshanda (arm)

The following nouns in Tshivenda are associated with **arm**.

(1) a. Tshanda (arm, class 7)

    b. Lukudavhavha (elbows, class 11)

    c. Gopwa (armpit, class 5)

    d. Vili (wrist, class 5)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns:

Morphological features
Nouns class

The following nouns in (1) above may appear with two prefixes.

(2) a. Tshanda / zwanda (arms, class 7/8)

    b. Lukudavhavha / vhukudavhavha (elbows, class 11/14)

    c. Gopwa / magopwa (armpists, class 5/6)

    f. Vili / mavhili (wrists, class 5/6)

These nouns may then not be considered as mass nouns

Conclusion

The followng nouns do not accept all those features and they should then not be considered as mass nouns: gopwa; tshanḓa; vili; lukuḓavhavha.

3.4.5.9   Mulenzhe (leg)

The following nouns in Tshivenḓa are associated with **leg**.

(1) a. Mulenzhe (leg, class 3)

  b. Gona (knee, class 5)

  c. Khando (foot sole, class 9)

  f.   Tshikunwe (toe, class 7)

  g. Tshirethe (heel, class 7)

  h. Gunwe (great toe, class 5)

  i.   Tshirumbi (thigh, class 7)

  j.   Ṱhafu (calf, class 9)

  k. Tshilidzavhakalaha (ankle, class 7)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

a. Noun class

The following nouns in (1) above may appear with two prefixes:

(2) a. Mulenzhe / milenzhe (legs, class 3/4)

  b. Gona / magona (knees, class 5/6)

  c. Khando / dzikhando (feet soles, class 9/10)

  d. Tshikunwe / zwikunwe (toes, class 7/8)

  e. Tshirethe /zwirethe (heels, class 7/8)

  f.   Gunwe /magunwe (great toes, class 5/6)

  g. Tshirumbi / zwirumbi (thighs, class 7/8)

  h. Ṱhafu / dziṱhafu (calves, class 9/10

  i.   Tshilidzavhakalaha /zwilidzavhakalaha (ankles, class 7/8)

These nouns may then not be considered as mass nouns.

Conclusion

The following nouns do not accept all those features and they should then not be considered as mass nous:

gunwe; tshirumbi; thafu; tshilidzavhakalaha; khando; gona; tshikunwe; tshirethe and mulenzhe.

3.4.5.10   Lwayo (foot)

The following nouns in Tshivenḓa are associated with **foot.**

(1) a. Luṋala (nail, class 11)

    b. Khando (sole of foot/ class 9)

    c. Tshikunwe (toe, class 7)

    d. Tshirethe (heel, class 7)

    e. Gunwe (great toe, class 5)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological featuers

Noun class

The following nouns in (1) above may appear with two prefixes.

(2) a. Luṋala / vhuṋala (nails, class 11/14)

    b. Khando / dzikhando (soles of feet, class 9/10)

    c. Tshikunwe / zwikunwe (toes, class 7/8)

    d.   Gunwe / makunwe (great toes, class 5/6)

These nouns may then not be considered as mass nouns.

Conclusion

The following nouns do not accept all those features and they should then not be

considered as mass nouns:

luṋala; khando; tshikunwe and gunwe.

3.4.5.11 Marambo (bones)

The following nouns in Tshivenḓa are associated with **bones:**

(1) a. Shambo (bone, class 5)

    b. Famba (collarbone, class 5)

    c. Mbabvu (rib, class 9)

    d. Muṱoḓo (spine, class 3)

    e. Khundu (waist, class 9)

    f. Dethele (skull, class 5)

    g. Ṅwondo (shin-bone, class 3)

    h. Mukala (cartilage, class 3)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

Noun class

The following nouns may appear with two prefixes

(2) a. Shambo / marambo (bones, class 5/6)

    b. Famba / mafamba (collarbones, class 5/6)

    c. Mbabvu / dzimbabvu (ribs, class 9/10)

    d. Khundu / dzikhundu (waists, class 9/10)

    e. Dethele / madethele (skulls, class 5/6)

    f. Muṱoḓo / miṱoḓo (spines, class 3/4)

    g. Ṅwonḓo / miṅwonḓo (shin bones, class 3/4)

    h. Mukala / mikala (cartilages, class 3/4)

These nouns may then not be considered as mass nouns.

Conclusion

The following nouns do not accept all those features and they should not be considered as mass nouns:

mukala; nwondo; mutodo; dethele; khundu; mbabvu; famba and shambo.

3.4.6   Humans

The following nouns in Tshivenda are associated with **humans**

(1) a. Mutukana (boy, class 1)

   b. Mubvana (young married woman, class1)

   c. Mudededzi (teacher, class 1)

   d. Muongi (nurse, class 1)

   e. Muhedana (meek, class 1)

   f. Muhali (brave, class1)

   g. Mufhuri (deceitful, class 1)

   h. Muofisiri (officer, class 1)

   i. Muimeleli (advocate, class 1)

   j. Mulimi (farmer, class1)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns:

Morphological features

Noun class

The following nouns may appear with two prefixes.

(2) a. Mutukana / vhatukana (boys, class 1/2)

   b. Mubvana / vhabvana (young married women, class 1/2)

   c. Mudededzi / vhadededzi (teachers, class 1/2)

   d. Muongi / vhaongi (nurses, class 1/2)

   e. Muhedana / vhahedana (meeks, class 1/2)

   f. Muhali / vhahali, (braves, class 1/2)

   g. Mufuri / vhafhuri (deceitful, class 1/2)

h. Muofisiri / vhaofisiri (officer, class 1/2)

i. Muimeleli / vhaimeleli (advocates, class 1/2)

j. Mulimi / vhalimi (farmers class1/2)

These nouns may then not be considered as mass nouns.

Conclusion

The following nouns do not accept all those features and they should then not be considered as mass nouns:

Mutukana; mubvana; mudededzi; muongi; muhedana; muhali; mufhuri etc.

3.4.7   Plant

A plant is a living thing that grows in the earth and has stem, leaves and roots. The following nouns in Tshivenda may have this reference:

(1) a. Muri (tree, class 3)

b. Muhuyu (wildfig tree, class 3)

c. Muunga (acacia tree, class 3)

d. Muvhula (the tree grysappel, class 3)

e. Mufula (Maroela tree, class 3)

f. Mutu (the waterberry tree, class 3)

g. Murebeila (mulberry tree, class 3)

h. Mufhanda (lonchocarpus capassa, class 3)

i. Muswiri (orange tree, class 3)

j. Munngo (mango tree, class 3)

The nouns in (1) above will now be investigated through certain morphological and syntactie features to see whether they are mass nouns.

Morphological features
Noun class

The following nouns in (1) above may appear with two prefixes:

(2) a. Muri / miri (trees, class 3/4)

    b. Muhuyu / mahuyu (wildfig trees, class 3/4)

    c. Muunga / miunga (accacia trees, class 3/4)

    d. Muvhula / mivhula (the trees grysappel, class 3/4)

    e. Mufula / mifula (maroela trees, class 3/4)

    f. Muṱu / miṱu (the waterberry trees, class 3/4)

    g. Murebeila / mirebeila (mulberry trees, class 3/4)

    h. Mufhanda / mifhanda (lonchcarpus capass trees, class 3/4)

    i. Muswiri / miswiri (orange trees, class 3/4)

    j. Munngo / minngo (mango trees, class 3/4)

These nouns may then not be considered as mass nouns

Conclusion

The following nouns do not accept all those features and they should then not be considered as mass nouns:

Muri; muhuyu; muunga; muvhula; mufula; muṱu; murebeila; mufhanda; muswiri; munngo etc.

3.4.8   Animal

An animal is also any living thing that is not a plant. The following nouns in Tshivenḓa are associated with **animal**

(1) a. Pfeṋe (baboon, class 5)

    b. Ṱhoho (vervet monkey, class 9)

    c. Nḓou (elephant, class 9)

    d. Ntsa (antelope, class 9)

    e. Ndau (lion, class 9)

    f. Ṋowa (snake, class 9)

    g. Kholomo (cattle, class 9)

    h. Phele (hyenal, class 9)

    i. Nngwe (leopard, class 9)

    j. Ṋari (buffalo, class 9)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

Noun class

The following nouns in (1) above may appear with two prefixes:

(2) a. Pfene / mapfene (baboons, class 5/6)

   b. Thoho / dzithoho (vervet monkeys, class 9/10)

   c. Ndou / dzindou (elephants, class 9/10)

   d. Ntsa / dzintsa (antelopes, class 9/10)

   e. Ndau / dzindau (lions, class 9/10)

   f. Nowa / dzinowa (snakes, class 9/10)

   g. Kholomo / dzikholomo (cattle, class 9/10)

   h. Phele / dziphele (hyenas, class 9/10)

   i. Nngwe / dzinngwe (leopards, class 9/10)

   j. Nari / dzinari (buffalos, class 9/10)

These nouns may then not be considered as mass nouns.

Conclusion

The following nouns do not accept all those features and they should then not be considered as mass nouns:

Pfene; thoho; ndou; nngwe;nari ; phele; kholomo; nowa; ndau; ntsa etc.

3.4.9   Action

Action is doing something for a particular purpose. The following nouns in Tshivenda are associated with action.

(1) a. Mutshino (dance, class 3)

   b. Mashudu (blessing, class 6)

   c. Maano (plan of doing something, class 6)

   d. Vhuhali (bold efforts, class 14)

    e. Nyaṇḍadzo (publicity, class 9)

    f. Mapwapwalala (strident laughter, class 6)

    g. Vhupelea (despicable behaviour, class 14)

    h. Mulingo (test, exam, class3)

    i. Ndiliso (condolence, class 9)

    j. Mutshato (wedding ceremony, class 3)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

a. Noun class

The nouns in (1b; 1c; 1d; 1f;1g) may appear with one noun class prefix and they may thus be regarded as mass nouns:

The following nouns in (1) may appear with two prefixes:

(2) a. Mutshino / mitshino (dances, class 3/4)

    b. Nyaṇḍadzo / dzinyaṇḍandzo (publicities, class 9/10)

    c. Mulingo / milingo (tests, exams, class 3/4)

    d. Ndiliso / dzindiliso (condolences, class 9/10)

    e. Mutshato / mitshato (weding ceremonies, class 3/4)

These nouns may then not be considered as mass nous.

b. Diminutive

The diminutive which appears with mass nouns has to refer to a small quantity. The suffix **–nyana** usually appear with this meaning.

(3) a. Mashudunyana (a small quantity of blessing)

    b. Vhuhalinyana (a small quantity of bold of efforts)

    c. Maanonyana (a small quantity of plan of doing something)

    d. Mapwapwalalanyana (a small quantity of strident laughter)

   e. Vhupeleanyana (a small quantity of despicable behaviour)

Synthactic features

a. Appearance with quantifiers

Numerals

Mass nouns may not appear with **numerals:**

(4) *a. Mashudu mararu (three blessings)

   *b. Vhuhali vhuṋa (four bold of efforts)

   *c. Maano mavhili (two plan of doing somethings)

   *d. Mapwapwalala mararu (three strident laughters)

   *e. Vhupelea vhuṱanu (five despicable behaviours)

Universal quantifiers

Both count and mass nouns may appear with **–oṱhe**.

(5) a. Mashudu oṱhe (all blessing)

   b. Vhuhali hoṱhe (all bold of efforts)

   c. Maano oṱhe (all plan of doing something)

   d. Mapwapwalala oṱhe (all strident laughter)

   e. Vhupelea hoṱhe (all despicable behaviour)

Quantifier adjectives

The adjective stems **–nzhi** and **–ṱuku** may appear with mass and count nouns.

(6) a. Mashudu manzhi (a huge quantity of blessing)

      Mashudu maṱuku (a small quantity of blessing)

   b. Vhuhali vhunzhi (a huge quantity of bold of efforts)

      Vhuhali vhuṱuku (a small quantity of bold of efforts)

   c. Maano manzhi (a huge quantity of plan of doing something)

      Maano maṱuku (a small quantity of plan of doing something)

   d. Mapwapwalala manzhi (a huge quantity of strident laughter)

      Mapwapwalala maṱuku (a small quantity of strident laughter)

   e. Vhupelea vhunzhi (a huge quantity of despicable behaviour)

      Vhupelea vhuṱuku (a small quantity of despicable behaviour)

b. Appearance as subjects of reciprocal verbs

Reciprocal verbs with –ana

    a. Mashudu a a elana.

       (The blessing are the same)

    b. Maano a vangana

       (The plan of doing something mixes)

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic feature of mass nouns.

Nouns which appear with one class prefix and they accept features of mass nouns:

Maano, vhuhali, mapwapwalala,mashundu and vhupelea

The following nouns do not accept all those features and they should then not be considered as mass nouns: Mutshino; Nyandano; mulingo; ndiliso; mutshato etc.

3.4.10   Event

An event is something that happens especially something unusual or important. The following nouns in Tshivenda are associated with **event.**

(1) a. Ndugiselo (preparation, class 9)

    b. Vhunulathumbu (abortion, class 14)

    c. Vhuvhava (theft, class 14)

    d. Mathomo (beginning, class 6)

    e. Vhuloi (witchcraft, class 14)

    f. Vhuronwane (gentle handling, class 14)

    g. Vhuhovheleli (striving for superiority class 14)

    h. Vhutambo (ceremony, class 14)

    i. Ndowendowe (training, class 9)

    j. Thalano (separation, class 9)

    k. Thendelano (agreement, class 9)

    l. Thengiso (sale, class 9)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

a. Nouns class

The following nouns in (1b; 1c; 1d; 1e; 1f; 1g; 1h) may appear with one noun class prefix and they may thus be regarded as mass nouns.

The following nouns in (1) may appear with two prefixes

(2) a. Ndowendowe / dzindowendowe (trainings, class 9/10)

    b. Thalano / dzithalano (separations, class 9/10)

    c. Thendelano / dzithendelano (agreements, class 9/10)

    d. Thengiso / dzithengiso (sales, class 9/10)

    e. Ndungiselo / dzindungiselo (preparations, class 9/10)

These nouns may not be considered as mass nouns

b. Diminutive

The diminutive which appears with mass nouns has to refer to a small quantity. The suffix **–nyana** usually appears with this meaning.

(3) a. Vhunulathumbunyana (a small quantity of abortion)

    b. Vhuvhavanyana (a small quantity of theft)

    c. Mathomonyana (a small quantity of beginning)

    d. Vhuloinyana (a small quantity witchcraft)

    e. Vhuronwanenyana (a small quantity of gettle handling))

    f. Vhuhovhelelinyana (a small quantity of striving for superiority)

    g. Vhutambonyana (a small quantity of opening ceremony)

Syntactic features

Appearance with quantifiers

Numerals

Mass nouns may not appear with **numerals:**

(4) *a. Vhuṋulathumbu vhuraru (three abortions)

   *b. Vhuvhava vhuraru (three thefts)

   *c. Vhuloi vhuṋa (four witchcrafts)

   *d. Vhuronwane vhuvhili (two gentle handlings)

   *e. Vhuhovheleli vhuṋa (four striving for superiorities)

   *f. Vhuṱambo vhuṱanu (five opening ceremonies)

   *g. Mathomo mararu (three beginnings)

Universal quatifier

Both count and mass nouns may appear with **-oṱhe**

(5) a. Vhuṋulathumbu hoṱhe (all abortion)

   b. Vhuvhava hoṱhe (all theft)

   c. Vhuloi hoṱhe (all witchcraft)

   d. Vhuronwane hoṱhe (all gentle handling)

   e. Vhuhovheleli hoṱhe (all striving for superiority)

   f. Vhuṱambo hoṱhe (all opening ceremony)

   g. Mathomo oṱhe (all beginning)

Quantifier adjectives

The adjective stems **–nzhi** and **–ṱuku** may appear with mass and count nouns.

(6) a. Vhuṋulathumbu vhunzhi (a huge quantity of abortion)
        Vhuṋulathumbu vhuṱuku (a small quantity of abortion)

   b. Vhuvhava vhunzhi (a huge quantity of theft)
        Vhuvhava vhuṱuku (a small quantity of theft)

   c. Mathomo manzhi (a huge quantity of beginning)
        Mathomo maṱuku (a small quantity of beginning)

   d. Vhuronwane vhunzhi (a huge quantity of gentle handling)
        Vhuronwane vhuṱuku (a small quantity of gentle handling)

   e. Vhuhovheleli vhunzhi (a huge quantity of striving for superiority)
        Vhuhovheleli vhuṱuku (a huge quantity of striving for superiority)

   f. Vhuṱambo vhunzhi (a huge quantity of opening ceremony)
        Vhuṱambo vhuṱuku (a small quantity of opening ceremony)

   g. Vhuloi vhunzhi (a huge quantity of witchcraft)

Vhuloi vhuṱuku (a small quantity of witchcraft)

b. Appearance as subject of reciprocal verbs

(7) Reciprocal verbs with **–ana**

With plural prefixes **Ma-** and **Vhu-**

a. Mathomo a a tevhekana

(The beginning fallows after one another).

b. Vhuloi vhu a vangana.

(The witchcraft become mixed up).

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic features and they should then be regarded as mass nouns:

Vhuṋulathumbu; vhuvhava; ,mathomo; vhuloi; vhuronwane; vhuṱambo and vhuhovheleli.

The following nouns do not accept all those features and they should then not be considered as mass nouns:

Nḓowenḓowe; ṱhalano; thendelano; thengiso and ndungiselo.

3.4.11   State

The following nouns in Tshivenḓa are associated with **state**

(1) a. Vhufulufhedzei (trust worthiness, class 14)

b. Vhushai (poverty, class 14)

c. Vhuḓiimiseli (willingness , class 14)

d. Vhuvhaivhai (brightness, class 14)

e. Vhuḓahela (stupidity, class 14)

f. Vhuswina (enmity, class 14)

g. Vhupomoki (blame, class 14)

h. Vhutsilu (foolishness, class 14)

i. Vhubva (laziness, class 14)

j. Vhufhura (craftiness, class 14)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

a. Noun class

The following nouns in (1) above may appear with one noun class prefix and they may thus be regarded as mass nouns

b. Diminutive

The diminutive which appears with mass nouns has to refer to a small quantity. The suffix **–nyana** usually appear with this meaning:

(3) a. Vhufhulufhedzeinyana (a small quantity of trustworthiness)

   b. Vhushainyana (a small quantity of poverty)

   c. Vhudiimiselinyana (a small quantity of willingness)

   d. Vhuvhaivhainyana (a small quantity of brighness)

   e. Vhudahelanyana (a small quantity of stupidity)

   f. Vhuswinanyana (a small quantity of enmity)

   g. Vhupomoki (a small quantity of blame)

   h. Vhutsilunyana (a small quantity of foolishness)

   i. Vhubvanyana (a small quantity of laziness)

   j. Vhufhuranyana (a small quantity of craftiness)

Syntactic features

Appearance with quantifiers

Numerals

Mass nouns may not appear with **numerals:**

(4) *a. Vhufhulufhedzei vhuraru (three trustworthiness)

   *b. Vhushai vhuvhili (two poverties)

   *c. Vhudiimiseli vhuraru (three willingness)

   *d. Vhuvhaivhai vhuna (four brightness)

   *e. Vhudahela vhuraru (three stupidities)

   *f. Vhuswina vhutanu (five enmity)

   *g. Vhupomoki vhuraru (three blamezs)

   *h. Vhufhura vhuvhili (two craftness)

   *i. Vhubva vhuna (four laziness)

*j. Vhutsilu vhuvhili (two foolishness)

Universal qualifier

Both count and mass nouns may appear with **-oṱhe**

(5) a. Vhufhura hoṱhe (all craftness)

   b. Vhubva hoṱhe (all laziness)

   c. Vhutsilu hoṱhe (all foolishness)

   d. Vhupomoki hoṱhe (all blame)

   e. Vhuswina hoṱhe (all enmity)

   f. Vhuḓahela hoṱhe (all stupidity)

   g. Vhuvhaivhai hoṱhe (all brightness)

   h. Vhuḓiimiseli hoṱhe (all willingness)

   i. Vhushai hoṱhe (all poverty)

   j. Vhufhulufhedzei hoṱhe (all trustworthiness)

Quantifier adjectives

The adjective stems **-nzhi** and **-ṱuku** may appear with mass and count nouns.

(6) a. Vhufhura vhunzhi (a huge quantity of craftness)

       Vhufhura vhuṱuku (a small quantity of craftness)

   b. Vhubva vhunzhi (a huge quantity of laziness)

       Vhubva vhuṱuku (a small quantity of laziness)

   c. Vhutsilu vhunzhi (a huge quantity of foolishness)

       Vhutsilu vhuṱuku (a small quantity of foolishness)

   d. Vhuswina vhunzhi (a huge quantity of enmity)

       Vhuswina vhuṱuku (a small quantity of enmity)

   e. Vhushai vhunzhi (a huge quantity of poverty)

       Vhushai vhuṱuku (a small quantity of poverty)

   f. Vhuḓiimiseli vhunzhi (a huge quantity of willingness)

       Vhuḓiimiseli vhuṱuku (a small quantity of willingness)

   g. Vhuvhaivhai vhunzhi (a huge quantity of brightness)

       Vhuvhaivhai vhuṱuku (a small quantity of brightness)

   h. Vhufhulufhedzei vhunzhi (a huge quantity of trustworthiness)

       Vhufhulufhedzei vhuṱuku (a small quantity of trustworthiness)

i.   Vhuḓahela vhunzhi (a huge quantity of stupidity)

Vhuḓahela vhuṱuku (a small quantity of stupidity)

j.   Vhupomoki vhunzhi (a huge quantity of blame)

Vhupomoki vhuṱuku (a small quantity of blame)

b. Appearance as subjects of reciprocal verbs

(7) Reciprocal verbs with **-ana**

With plural prefix Vhu-

a. Vhushai vhu a welana.

(The poverty falls on one another)

b. Vhufhura vhu a vangana.

(The craftiness become mixed up).

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic features and they should then be regarded as mass nouns:

Vhubva; vhufhura; vhutsilu; vhuḓahela; vhushai; vhuḓiimiseli; vhupomoki; vhuswina and vhufhulufhedzei.

3.4.12   Illness

Illness is the fact or experience of being ill. The following nouns in Tshivenḓa are associated with **illness**.

(1) a. Mapele (leprosy, class 6)

b. Mawi (mumps, class 6)

c. Nombe (scurvy, class 3)

d. Misho (infantile paralysis, class 3)

e. Lwefha (bad breath, class11)

f. Munyavhili (itching rash, class 3)

g. Tshitshimbili (big ulcer, class 7)

h. Mikota (nose bleeding, class 4)

i. Phopho (wart, class 9)

j. Tshipfula (sickness sent one by magic, class 7)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

a. Noun class

The nouns in (1a; 1b; 1c; 1d; 1e; 1f; 1h) may appear with one noun class prefix and they may thus be regarded as mass nouns.

The following nouns in (1) above may appear with two prefixes.

(2) a. Tshitshimbili / zwitshimbili (boils, class 7/8)

    b. Phopho / dziphopho (warts,class 9/10)

    c. Tshipfula / zwipfula (sickness sent one by magic, class 7/8)

These nouns may then not be considered as mass nouns

Diminutive

The diminutive which appears with mass nouns has to refer to small quantity. The suffix **–nyana** usually appears with this meaning.

(3) a. Munyavhilinyana (small quantity of itching rash)

    b. Mapelenyana (small quantity of leprosy)

    c. Mawinyana (small quantity of mumps)

    d. Lwefhanyana (small quantity of bad breath)

    e. Mishonyana (small quantity of infantile paralysis)

    f. Nombelanyana (small quantity of scurvy)

    g. Mikotanyana (a small quantity of nose bleeding)

Syntactic features

a. Appearance with quantifiers

Numeral

Mass nouns may not appear with **numerals:**

(4) *a. Munyavhili vhuṋa (four itching rashies)

    *b. Nombe miraru (three scurvies)

    *c. Mawi maṋa (four mumps)

*d. Lwefha luvhili (two bad breathies)

*e. Mapele mavhili (two leprosies)

*f. Misho miraru (three infantile paralysises)

*g. Mikota mina (four nose bleedings)

Universal qualifier

Both count and mass nouns may appear with **-othe**:

(5) a. Nombe yothe (all scurvy)

b. Munyavhili hothe (all itching rash)

c. Mawi othe (all mumps)

d. Misho yothe (all infantile Paralysis)

e. Mapele othe (all leprosy)

f. Lwefha lwothe (all bad breath)

g. Mikota yothe (all nose bleeding)

Quantifier adjectives

The adjective stems **–nzhi** and **–tuku** may appear with mass and count nouns.

(6) a. Mapele manzhi (a huge quantity of leprosy)

Mapele matuku (a small quantity of leprosy)

b. Mawi manzhi (a huge quantity of mumps)

Mawi matuku (a small quantity of mumps)

c. Nombe nnzhi (a huge quantity of scurvy)

Nombe thukhu (a small quantity of scurvy)

d. Lwefha lunzhi (a huge quantity of badbreath)

Lwefha lutuku (a small quantity of badbreath)

e. Misho minzhi (a huge quantity of infantile paralysis)

Misho mituku (a small quntity of infantile paralysis)

f. Munyavhili munzhi (a huge quantity of itching rash)

Munyavhili mutuku (a small quntity of itching rash)

g. Mikota minzhi (a huge quantity of nose bleeding)

Mikota mituku (a small quantity of noise bleeding)

b. Appearance as subjects of reciprocal verbs

(7) Reciprocal verbs with **-ana**

With plural prefixes **Ma-** and **Vhu-**

    a. Mawi a a welana.

       (The mumps falls on one another)

    b. Mapele a a vangana.

       (The leprosy become mixed up).

With singular prefix **-lu-**

    c. Lwefha lu a elana.

       (The bad breath is the same).

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic features and they should then be regarded as mass nouns:

(i) Nouns which appear with one prefix and they accept features of mass nouns: Mawi; mapele; nombe; munyavhili and misho.

The following nouns do not accept all those features and they should then not be considered as mass nouns: tshitshimbili; phopho and tshipfula.

3.4.13   Culture

Culture consists of the ideas, customs, and art produced by a particular society. The following nouns in Tshivenda are associated with culture

(1) a. Mphade (boy's circumcision lodge, class 3)

    b. Thondwana (hut for young people, class 9)

    c. Lumalo lunzhi (polygamy, class 11)

    d. Muḽoro (vision, class 3)

    e. Thahiso (abduction of a girl, class 9)

    f. Musevhetho (girls initiation, class 3)

    g. Tshikona (reed dance, class 7)

    h. Dzunde (chief's garden, class 5)

    i. Domba (group rites as preliminary to marriage, class 5)

j. Dzekiso (bride price, class 5)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns

Morphological features

Nouns class

The following nouns in (1) may appear with two prefixes:

(2) a. Mphade / miphade (boy's circumcision lodges, class 3/4)

b. Thondwana / dzithondwana (huts for young people, class 9/10)

c. Lumalo lunzhi / vhumalo vhunzhi (polygamy, class 11/14)

d. Muḽoro / miḽoro (visions, class 3/4)

e. Thahiso / dzithahiso (abductions of girls, class 9/10)

f. Musevhetho / misevhetho (girls initations, class 3/4)

g. Tshikona / zwikona (reed dances, class 7/8)

h. Dzunde /madzunde (chiefs gardens, class 5/6)

i. Domba / madomba (group rites as prediminary to marriage, class 5/6)

j. Dzekiso / madzekiso (bride prices, class 9/10)

These nouns may then not be considered as mass nouns

Conclusion

The following nouns do not accept all those feature and they should then not be considered as mass nouns: mphade; thondwana; muḽoro; thahiso; musevhetho; tshikona; dzunde; domba; dzekiso.

3.4.14 Communication

Communication is the activity or process of giving information to other people or living things. The following nouns in Tshivenḓa are associated with communication.

(1) a. Maitele (manner of doing things, class 6)

b. Vhuṱala (inkling, class 14)

    c. Maṱhakheṱhakhe (climax, class 6)

    d. Mulayo (law, class 3)

    e. Mavharivhari (rumours, class 6)

    f. Maloto (incoherent, class 6)

    g. Lugungulo (grumbling, class 11)

    h. Tsemano (scolding, class 9)

    i. Thai (riddle, class 9)

    j. Muswaswo (embelishments mastery in a story, class 4)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are massnouns.

Morphological features

a. Noun class

The following nouns in (1a, 1b, 1c, 1e, 1f, 1g) may appear with one noun class prefix and they may thus be regarded as mass nouns.

The following nouns in (1) above may appear with two prefixes.

(2) a. Tsemano/dzitsemano (scolding, class 9/10)

    b. Thai/dzithai (riddles, class 9/10)

    c. Muswaswo/miswaswo (embelishments in stories, class 3/4)

    d. Mulayo/milayo (laws, class 3/4)

These nouns may then not be considered as mass nouns:

b. Diminutive

The diminutive which appears with mass nouns has to refer to a small quantity. The suffix **-nyana** usually appears with this meaning

(3) a. Maitelenyana (a small quantity of manner of doing things)

    b. Vhuṱalanyana (a small quantity of inkling)

    c. Maṱhakheṱhakhenyana (a small quantity of climax)

    d. Mavharivharinyana (a small quantity of rumours)

    e. Malotonyana (a small quantity of incoherent)

f. Lugungulonyana (a small quantity of grumbling)

Syntactic features

Appearance with quantifiers

Numerals

Mass nouns may not appear with **numerals:**

(4) *a. Maitele maṇa (four manner of doing things)

  *b. Vhuṭala vhuraru (three inklings)

  *c. Maṱhakheṱhakhe maṇa (four climaxies)

  *d. Mavharivhari mararu (three rumours)

  *e. Maloto mavhili (two incoherents)

  *f. Lungulo luvhili (two grumblings)

Universal quantifier

Both count and mass nouns may appear with **-oṭhe**:

(5) a. Maitele oṭhe (all manner of doing things)

  b. Vhuṭala hoṭhe (all inkling)

  c. Maṱhakheṱhakhe oṭhe (all climax)

  d. Mavharivhari oṭhe (all rumours)

  e. Maloto oṭhe (all incoherent)

  f. Lugungulo lwoṭhe (all grumbling)

Quantifier adjectives

The adjective stems **-nzhi** and **–ṭuku** may appear with mass and count nouns.

(6) a. Maitele manzhi (a huge quantity of manner of doing things)

      Maitele maṭuku (a small quantity of manner of doing things)

  b. Vhuṭala vhunzhi (a huge quantity of inkling)

      Vhuṭala vhuṭuku (a small quantity of inkling)

  c. Maṱhakheṱhakhe manzhi (a huge quantity of climax)

      Maṱhakheṱhakhe maṭuku (a small quantity of climax)

  d. Mavharivhari manzhi (a huge quantity of rumours)

      Mavharivhari maṭuku (a smal quantity of rumours)

  e. Maloto manzhi (a huge quantity of incoherent)

Maloto maṱuku (a small quantity of incoherent)

f. Lugungulo lunzhi (a huge quantity of grumbling)

Lungungulo luṱuku (a small quantity of grumbling)

b. Appearance as subjects of reciprocal verbs

(7) Reciprocal verbs with **–ana**

With plural prefixes **Ma-** and **Vhu-**

a. Mavharivhari a a elana

(The rumours are the same)

b. Vhuṱala vhu a vangana

(The inkling mixes)

With singular prefix

Lugungulo lu a tangana

(The grumbling mixes)

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic features and they should then be regarded as mass nouns. mavharivhari, maṱhakheṱhakhe, lugungulo, maloto, maitele and vhuṱala.

The following nouns do not accept all those features and they should then not be considered as massnouns, tsemano, thai, muswaswo and mulayo.

3.4.15 Cognition

Cognition is the mental process involved in knowing, learning and understanding things, a formal word. The following nouns in Tshivenḓa are associated with cognition.

(1) a. Vhuleme (problem, class 14)

b. Mashudumavhi (badluck, class 6)

c. Vhukhakhi (fault, class 14)

d. Vhuimeleli (intercession, class 14)

e. Vhutsila (knowledge, class 14)

    f. Vhuḓifhinduleli (responsibility, class 14)

    g. Thaidzo (problem, class 9)

    h. Nyiledzo (tabu, class 9)

    i. Ṱhoni (embarrassment), class 9)

    j. Tshisolo (blame, class 7)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features

a. Nounclass

The following nouns in (1a, 1b, 1c, 1d, 1e, 1f) may appear with one noun class prefix and they may thus be regarded as mass nouns.

The following nouns in (1) above may appear with two prefixes:

(2) a. Thaidzo/dzithaidzo (problems, class 9/10)

    b. Nyiledzo/dzinyiledzo (taboos, class 9/10)

    c. Ṱhoni/dziṱhoni (ambarrassments, class 9/10)

    d. Tshisolo/zwisolo (blames, class 7/8)

These nouns may then not be considered as mass nouns.

b. Diminutive

The diminutive which appears with mass nouns has to refer to a small quantity. The suffix **-nyana** usually appear with this meaning.

(3) a. Vhulemenyana (a small quantity of problems)

    b. Mashudumavhinyana (a small quantity of badlucks)

    c. Vhukhakhinyana (a small quantity of faults)

    d. Vhuimelelinyana (a small quantity of intercessions)

    e. Vhutsilanyana (a small quantity of knowledges)

    f. Vhuḓifhindulelinyana (a small quantity of responsibilities)

Syntactic features

Appearance with quantifiers

Numerals

Massnouns may not appear with **numerals.**

(4) *a. Vhuleme vhuraru (three problems)

   *b. Mashudumavhi mavhili (two badlucks)

   *c. Vhukhakhi vhuraru (three faults)

   *d. Vhuimeleli vhuvhili (two intercessions)

   *e. Vhutsila vhuraru (three knowledges)

   *f. Vhudifhinduleli vhuvhili (two responsibilities)

Universal quantifier

Both count and massnouns may appear with **-othe**

(5) a. Vhuleme hothe (all problems)

   b. Vhukhakhi hothe (all faults)

   c. Vhuimeleli hothe (all intercessions)

   d. Vhutsila hothe (all knowledges)

   e. Mashudu mavhi othe (all badlucks)

Universal quantifier

Quantifier adjectives

The adjective stems **–nzhi** and **–tuku** may appear with mass and count nouns.

(6) a. Vhuleme vhunzhi (a huge quantity of problem)

     Vhuleme vhutuku (a small quantity of problem)

   b. Mashudu mavhi manzhi (a huge quantity of badluck)

     Mashudu mavhi matuku (a small quantity of badluck)

   c. Vhukhakhi vhunzhi (a huge quantity of fault)

     Vhukhakhi vhutuku (a small quantity of fault)

   d. Vhutsila vhunzhi (a huge quantity of knowledge)

     Vhutsila vhutuku (a small quantity of knowledge)

   e. Vhuimeleli vhunzhi (a huge quantity of responsibility)

     Vhuimeleli vhutuku (a small quantity of responsibility)

f. Vhuḓifhinduleli vhunzhi (a huge quantity of responsibility)

   Vhuḓifhinduleli vhuṱuku (a small quantity of resposibility)

b. Appearance as subjects of reciprocal verbs

(7) Reciprocal verbs with -ana

With plural prefix **Vhu-** and **Ma-**

a. Vhuleme vhu a elana

   (The problem are the same)

b. Vhukhakhi vhu a vangana

   (The fault mixes)

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic features and they should then be regarded as mass nouns. Nouns which appear with one prefix and they accept features of mass nouns: vhuḓifhinduleli, vhukhakhi, vhutsila, vhuleme, mashudu mavhi and vhuimeleli. The following nouns do not accept all those features and they should then not be considered as mass nouns thaidzo, nyiledzo, ṱhoni and tshisolo.

3.4.16 Feeling

Feeling is an emotion or attitude. The following nouns in Tshivenḓa are associated with feeling:

(1) a. Mazhuluzhulu (anxiety, class 6)

   b. Vhueṱhe (loneliness, class 14)

   c. Vhuṱungu (sorrow, class 14)

   d. Vivho (jealousy, class 5)

   e. Vhuthu (compassion, class 14)

   f. Vhulenda (purity of heart, class 14)

   g. Vhulondo (diligence, class 14)

   h. Vhulidzi (pity, class 14)

   i. Lufuno (love, class 11)

j.   Mafulufulu (enthusiasm, class 6)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns.

Morphological features
Nounclass

The nouns in (1a, 1b, 1c, 1e, 1f, 1g, 1h, 1i, 1j) may only appear with one noun prefix and they may thus be regarded as mass nouns. The following noun may appear with two prefixes and it may thus regarded as mass noun.

2. Vivho/mavivho

In the case of (2) above there is no difference in meanings between the singular noun and the plural noun. It may be regarded as mass noun

b. Diminutive

The diminutive which appears with mass nouns has to refer to a small quantity. The suffix **–nyana** usually appear with this meaning.

(3) a. Mazhuluzhulunyana (a small quantity of anxiety)

   b. Vhuethenyana (a small quantity of loneliness)

   c. Vhutungunyana (a small quantity of sorrow)

   d. Vivhonyana (a small quantity of jealousy)

   e. Vhuthunyana (a small quantity of compassion)

   f. Vhulendanyana (a small quantity of purity of heart)

   g. Vhulondonyana (a smal quantity of diligence)

   h. Vhulidzinyana (a small quantity of pity)

   i. Lufunonyana (a small quantity of love)

   j. Mafulufulunyana (a small quantity of anthusiasm)

Syntactic features
Appearance with quantifiers
Numerals

Mass nouns may not appear with **numerals:**

(4) *a. Mazhuluzhulu mararu (three anxieties)

   *b. Vhuethe vhuvhili (two loneliness)

   *c. Vhutungu vhuraru (three sorrows)

   *d. Vivho lina (four jeoleouses)

   *e. Vhuthu vhutanu (five compassions)

   *f. Vhulenda vhuraru (three purity of hearts)

   *g. Vhulondo vhuna (four diligences)

   *h. Vhulidzi vhuvhili (two pities)

   *i. Lufuno luvhili (two loves)

   *j. Mafulufulu mararu (three enthusiasms)

Universal quantifiers

Both count and mass nouns may appear with **–othe**

(5) a. Mazhuluzhulu othe (all anxiety)

   b. Vhuethe hothe (all loneliness)

   c. Vhutungu hothe (all sorrow)

   d. Vivho lothe (all jeoleousy)

   e. Vhuthu hothe (all compassion)

   f. Vhulenda hothe (all purity of heart)

   g. Vhulondo hothe (all diligence)

   h. Vhulidzi hothe (all pity)

   i. Lufuno lwothe (all love)

   j. Mafulufulu othe (all enthusiasm)

Quantifier adjectives

The adjective stems **–nzhi** and **–tuku** may appear with mass and count nouns.

(6) a. Mafulufulu manzhi (a huge quantity of enthusiasm)

     Mafulufulu matuku (a small quantity of enthusiasm)

   b. Lufuno lunzhi (a huge quantity of love)

     Lufuno lutuku (a small quantity of love)

   c. Vhulidzi vhunzhi (a huge quantity of pity)

Vhulidzi vhuṱuku (a small quantity of pity)

d. Vhulondo vhunzhi (a huge quantity of diligence)

Vhulondo vhuṱuku (a small quantity of diligence)

e. Vhulenda vhunzhi (a huge quantity of purity of heart)

Vhulenda vhuṱuku (a small quantity of purity of heart)

f. Vhuthu vhunzhi (a huge quantity of compassion)

Vhuthu vhuṱuku (a small quantity of compassion)

g. Vivho ḽinzhi (a huge quantity of jealousy)

Vivho ḽiṱuku (a small quantity of jealousy)

h. Vhuṱungu vhunzhi (a huge quantity of sorrow)

Vhuṱungu vhuṱuku (a small quantity of sorrow)

i. Mazhuluzhulu manzhi (a huge quantity of anxiety)

Mazhuluzhulu maṱuku (a small quantity of anxiety)

(b) Appearance as a subjects of reciprocal verbs

(7) Reciprocal verbs with **-ana**

With plural prefixes **Ma-** and **Vhu-**

a. Mazhuluzhulu a a elana

(The anxiety are the same)

b. Vhuṱungu vhu a vangana

(The sorrow mixes)

(ii) With singular prefix **Lu-**

Lufuno lu a welana

(The love falls on one another)

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic features and they should then be regarded as mass nouns.

(i) Nouns which appear with one class prefix and they accept features of mass nouns.

Mazhuluzhulu, vhueṱhe, vhuṱungu, vhuthu, vhulenda, vhulondo, vhulidzi and

mafulufulu.

(ii) Nouns which appear with two prefixes
       Vivho

3.4.17 Time

Time is what we measure in hours, days and years. The following nouns in Tshivenḓa are associated with **Time**

(1) a. Maḓautsha (early morning, class 14)

    b. Maṱambanḓou (dawn, class 14)

    c. Matsheloni (morning, class 14)

    d. Luṱavula (spring, class 11)

    e. Vhuria (winter, class 11)

    f. Tshikhala (chance, class 7)

    g. Muthethe (second, class 3)

    h. Tshikhathi (period of time, class 7)

    i. Tshifhinga (time, class 7)

    j. Awara (hour, class 9)

The nouns in (1) above will now be investigated through certain morphological and syntactic features to see whether they are mass nouns

Morphological features

a. Nounclass

The nouns in (1a, 1b, 1c, 1d, 1e) may only appear with one noun classprefix and they may thus be regarded as mass nouns.

The following nouns in (1) above may appear with two prefixes.

(2) a. Tshikhathi/zwikhathi (periods, class 7/8)

    b. Tshikhala/zwikhala (chances, class 7/8)

    c. Tshifhinga/zwifhinga (times, class 7/8)

    d. Awara/dziawara (hours, class 9/10)

    e. Muthethe/mithethe (seconds, class 3/8)

These nouns may then not be considered as mass nouns

b. Diminutive

The diminutive which appears with mass nouns has to refer to a small quantity. The suffix **–nyana** usually appear with this meaning.

(3) a. Maḓautshanyana (a small quantity of early morning)

    b. Maṱambanḓounyana (a small quantity of dawn)

    c. Matsheloninyana (a small quantity of morning)

    d. Luṱavulanyana (a small quantity of spring)

    e. Vhurianyana (a small quantity of winter)

Syntactic features

a. Appearance with quantifiers

Numerals

Mass nouns may not appear with **numerals**:

(4) *a. Maḓautsha mararu (three early mornings)

    *b. Maṱambanḓou mavhili (two dawns)

    *c. Matsheloni maṋa (four mornings)

    *d. Luṱavula luraru (three springs)

    *e. Vhuriavhuṋa (four winters)

Universal quantifiers

Both count and massnouns may appear with **–oṱhe**

(5) a. Maḓautsha oṱhe (all early morning)

    b. Maṱambanḓou oṱhe (all dawn)

    c. Matsheloni oṱhe (all morning)

    d. Luṱavula lwoṱhe (all spring)

    e. Vhuria hoṱhe (all winter)

Quantifier adjectives

The adjective stems **–nzhi** and **–ṱuku** may appear with mass and count nouns.

(6) a. Maḓautsha manzhi (a huge quantity of early morning)

Maḓautsha maṱuku (a smal quantity of early morning)

  b. Maṱambanḓou manzhi (a huge quantity of dawn)

Maṱambanḓou maṱuku (a small quantity of dawn)

  c. Matsheloni manzhi (a huge quantity of morning)

Matsheloni maṱuku (a small quantity of morning)

  d. Luṱavula lunzhi (a huge quantity of spring)

Luṱavula luṱuku (a small quantity of spring)

  e. Vhuria vhunzhi (a huge quantity of winter)

Vhuria vhuṱuku (a small quantity of winter)

(b) Appearance as subjects of reciprocal verbs

(7) Reciprocal verbs with **-ana**

With plural prefixes **Ma-** and **Vhu-**

a. Maṱambanḓou a a elana

(The dawn are the same)

b. Vhuria vhu a vangana

(The winter mixes)

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic features and they should then be regarded as mass nouns.

Vhuria, maḓautsha, matsheloni, luṱavula, maṱambanḓou.

The following nouns do not accept all those features and they should then not be considered as mass nouns; muthethe, tshikhala, tshifhinga, awara and tshikhathi.

3.4.18   Place

A place is any building, area, town, or country. The following nouns in Tshivenḓa are associated with place.

(1) a. Soga (desert, class 5)

   b. Maṱalala (wilderness, class 6)

   c. Mathaga (wildveld, class 6)

   d. Shango (country, class 5)

   e. Tshisi (ward of a headman, class 7)

   f.   Govha (low-lying plain, class 5)

   g. Khoro (open space, class 9)

   h. Mudavhi (open treeless level green area, class 3)

The nouns in (1) above will now be investigated through certain morpholoical and syntactic features to see whether they are mass nouns.

Morphological features

a. Noun class

The nouns in (1b, 1c) may only appear with one classprefix and they may thus be regarded as mass nouns.

The following nouns in (1) above may appear with two prefixes

(2) a. Govha/makovha (low-lying plains, class 5/6)

   b. Khoro/dzikhoro (open spaces for meetings, class 9/10)

   c. Soga/masoga (deserts, class 5/6)

   d. Mudavhi/midavhi (open treeless level green areas class 3/4)

   e. Tshisi/zwisi (wards of a headman, class 7/8)

   f.   Shango/mashango (countries, class 5/6)

These nouns may then not be considered as mass nouns.

b. Diminutive

The diminutive which appear with mass nouns has to refer to a small quantity. The suffix

–nyana usually appear with this meaning.

(3) a. Maṱalalanyana (a small wilderness)

   b. Mathaganyana (a small wild veld)

Syntactic features

a. Appearnce with quantifier

Numerals

Mass nouns may not appear with **numerals:**

(4) *a. Maṱalala mavhili (two wildernesses)

   *b. Mathaga mararu (three wildvelds)

   *c. Khagala mbili (two pen areas)

Universal quantifier

Both count and mass nouns may appear with **–oṱhe**

(5) a. Maṱalala oṱhe (all wilderness)

   b. Mathaga oṱhe (all wildveld)

   c. Khagala hoṱhe (all open area)

Quantifier adjectives

The adjective stems **–nzhi** and **–ṱuku** may appear with mass and count nouns.

(6) a. Mathaga manzhi (a huge quantity of wildveld)

      Mathaga maṱuku (a small quantity of wildveld)

   b. Maṱalala manzhi (a huge quantity of wilderness)

      Maṱalala maṱuku (a small quantity of wilderness)

(b) Appearance as subjects reciprocal verbs

(7) Reciprocal verbs with **-ana**

a. Maṱalala a a ṱangana

   (The wilderness meet each other)

b. Mathaga a a elana

   (The wildveld are the same)

Conclusion

From the discussion above, the following nouns accept all the morphological and syntactic features and they should then be regarded as massnouns. mathaga and maṱalala. The following nouns do not accept all those features and they should then not be considered as mass nouns: govha, khoro, soga, mudavhi, tshisi and shango.

CHAPTER 4

CONCLUSION

4.1   MASS NOUNS IN TSHIVENḒA

Eighteen nominal classes in Tshivenḓa have been investigated with the aim of establishing which of these nominal classes may possibly contains mass nouns. These nominal classes also show various subsections and some mass nouns do not appear in all subsections of a specific nominal class.

This study has isolated the following mass nouns as indicated below in the various nominal classes.

4.1.1.1   Natural Phenomena

The following subsections have been identified within the nominal class refers to Natural phenomena: earth, light, weather, noise, smoke, power and sky. The following mass nouns have been established in these subsections:

Earth: This subsection has been further divided into soil, mountain, water and vegetation:

Soil: a. Mavu (soil)

    b. Mavulutombo (gravelly soil)

    c. Mavutshakwane (fertile)

    d. Mvumba (clay soil)

    e. Buse (dust)

    f. Maṱafa (marshy ground)

    g. Matope (soft mud)

    h. Muṱavha (sand)

Water: a. Maḓi (water)

    b. Mashika (used water)

Vegetation: a. Madzula (remaining weeds)

b. Makukwe (debris)

c. Maswinzwilo (undergrowth)

d. Luṱori (area covered with bushes)

e. Lunzi (dense area of maize)

f. Ḓinzwi (dense area of vegetation)

Light: a. Masana (rays of sunlight)

b. Mapfuvhi (redness in the sky before sunrise)

c. Tshedza (light)

Weather:

Rain: a. Vhusuṱo (drizzle)

b. Manyaḓi (mist weather)

Noise: a. Mahovhohovho (noise of rapids)

b. Mahuvhula (great roar)

Smoke: Vhutsi (smoke)

Power: Maanḓa (power)

Sky: Matitili (overcasting sky)

4.1.2   Natural Objects

The following subsections have been identified within the nominal class which refers to natural objects: object; mark; descriptive object.

Object: a. Musina (copper)

b. Musuku (gold)

c. Nonzhe (resin, gum)

d. Muṋo (salt)

e. Mulimo (poison)

4.1.3   Food

The following subsection have been identified within the nominal class which refers to food: food general; food porridge; food maize; food mixture; food bread; food meat. Liguid: This subsection has been further divided into: intoxicating liguid: Tshivenda beer and liquor non-intoxicating liguid.

Food: General

a. Zwiḽiwa (food)

b. Dzumo (food at a funeral service)

c. Mbuvha (food for a journey)

d. Muladza (left-over food)

e. Makoko (burnt food adhering to pot)

f. Pfumi (food meant for a chief)

Food: Porridge

a. Vhuswa (porridge)

b. Vhutete (porridge of fine maizemeal)

c. Mathuthu (roasted grains)

d. Munamba (porridge: maize and milk)

e. Mutuku (sour porridge)

f. Thophi (porridge from pumpkin)

g. Tshisese (porridge of small maize grains)

h. Tshiunza (porridge for children)

i. Mukapu (soft porridge)

Food: Maize

a. Mavhele (maize)

b. Mavhele matswuku (yellow maize)

c. Mavhele matshena (white maize)

d. Mpale (cobs of maize which hang from the roof)

e. Thuvhule (stamped maize with water)

f. Mugayo (crushed maize)

Food: Mixture

Tshidzimba (mixture of maize and beans)

Food: Meat

a. Khadzingo (roasted pieces of fat)

b. Mavhede (cooked blood of an animal with fat)

c. Muṱuvha (share of meat for slaughter)

d. Ṋama (meat)

e. Ḍamu (meat from a cow's stomach)

f. Tshiswai (mixture of normal meat and intenstines)

g. Tshireshi (meat from the lowerlip of a cow)

h. Phatha (meat from the spinal cord of a cow)

j. Tshiakha (meat from the breast of a cow)

Food: Vegetables

a. Ṋawa (beans)

b. Masheleni (roasted pumpkin seeds)

c. Eregisi (peas)

d. Dongo (vegetable cooked without salt)

e. Tshinange (a mixture of vegetables)

f. Dovhi (vegetables and peanuts)

Liguid: Intoxicating: Tshivenḓa beer

a. Mahafhe (Tshivenḓa beer)

b. Muthetshelo (beer for tasters)

c. Mutakulo (beer for boys and girls)

d. Musinḓelo (beer for those who helped in its brewing)

e. Pfumbavhulo (beer for chiefs and headman)

f. Mukumbi (moroela beer)

g. Lutanda (fermanted maroela beer)

h. Mabundu (thin porridge drink)

j. Muvanya (watery beer)

Liquor:

a. Halwa (liquor)

b. Biya (beer)

c. Waini (wine)

d. Waini tswuku (red wine)

e. Waini tshena (white wine)

f. Burandi (brandy)

g. Thothotho (home made brandy)

Non-intoxicating liguid:

a. Nyamunaithi (cold drink)

b. Makhaṱha (thick milk)

c. Tshithuvhi (milk from second to fourth day)

d. Murogodzho (milk which boys milk in mouth)

e. Luvhisi (fresh milk)

f. Buvha (skimmed milk)

g. Mikando (human milk)

h. Mafhi (milk)

4.1.4 Body parts

The following mass nouns are associated with body parts:

a. Maḓasi (male-genitals)

b. Vhuluvhi (brains)

c. Malofha (blood)

4.1.5 Action

The following mass nouns are associated with action:

a. Mashudu (blessing)

b. Vhuhali (bold efforts)

c. Maano (plan of doing something)

d. Mapwapwalala (strident laughter)

4.1.6　　Event

The following mass nouns are associated with **event**.

a. Vhunulathumbu (abortion)

b. Vhuvhava (theft)

c. Mathomo (beginning)

d. Vhuloi (whichcraft)

e. Vhuhovheleli (striving for superiority)

f. Vhutambo (opening ceremony)

4.1.7　　State

The following mass nouns are associated with **state**:

a. Vhufhulufhedzei (trust worthiness)

b. Vhushai (poverty)

c. Vhudiimiseli (willingness)

d. Vhuvhaivhai (brightness)

e. Vhudahela (stupidity)

f. Vhuswina (enmity)

g. Vhupomoki (blame)

h. Vhutsilu (foolishness)

i. Vhubva (laziness)

j. Vhufhura (raftiness)

4.1.8　　Illness

The following mass nouns are associated with **illness**:

a. Munyavhili (itching rash)

b. Mapele (leprosy)

c. Mawi (mumps)

d. Lwefha (bad breath)

e. Misho (infantile paralysis)

f. Nombe (scurvy)

g. Mikota (nose bleeding)

4.1.9 Communication

The following mass nouns are associated with **communication**:

a. Maitele (manner of doing this)

b. Vhutala (inkling)

c. Mathakhethakhe (climax)

d. Mavharivhari (rumours)

e. Maloto (incoherent)

f. Lugungulo (grumbling)

4.1.10 Cognition

The following mass nouns are associated with **cognition**:

a. Vhuleme (problem)

b. Mashudu mavhi (bad luck)

c. Vhukhakhi (fault)

d. Vhuimeleli (intercession)

e. Vhutsila (knowledge)

f. Vhudifhinduleli (responsibility)

4.1.11 Feeling

The following mass nouns are associated with **feeling**:

a. Mazhuluzhulu (anxiety)

b. Vhuethe (loneliness)

c. Vhutungu (sorrow)

d. Vivho (jealosy)

e. Vhuthu (kindness)

f. Vhulenda (purity of heart)

g. Vhulondo (diligence)

h. Vhulidzi (pity)

i. Lufuno (love)

j. Mafulufulu (enthusiasm)

4.1.12   Time

The following mass nouns are associated with **time**:

a. Maḓautsha (early morning)

b. Maṱambanḓou (dawn)

c. Matsheloni (morning)

d. Luṱavula (spring)

e. Vhuria (winter)

4.1.13   Place

The following mass nouns are associated with **place:**

a. Maṱalala (willderness)

b. Mathaga (wild veld)

The following nominal classes have no mass nouns

4.1.14   Artefact

The following subsections have been identified within the nominal class which refers to **artefact**.

a. Household: lufhanga (knife)

b. Garden (phaiphi: pipe)

c. Vehicle (goloi: car)

d. Building (nnḓu: house)

e. Clothes (hemmbe, shirt)

f. Ornaments (tshiṅina, earring)

g. Wood instruments (ṱhamu, cane)

h. Iron instruments (mbaḓo, axe)

i. Leather instruments (thambo, rope)

j. Fanitshara (tshidulo, table)

4.1.15   Humans

Musidzana (girl)

4.1.16   Plant

Muri (tree)

4.1.17   Animal

Nḓou (elephant)

4.1.18   Culture

Muloro (vision)

4.2 MORPHOLOGICAL FEATURES OF MASS NOUNS

A morphological distinction between mass nouns and count nouns is that mass nouns do not allow for paired noun classes. They only appear with a single class prefix.

(1) Maḓi (water) class 6)

Halwa (liquor) (class 14)

Count nouns appear in paired noun classes:

(2) Mulilo/mililo (fire) (3/4)

Munna/vhanna (man) (1/2)

Some concrete mass nouns may allow plural noun class prefixes, but then there is a shift of meaning in the plural of the noun:

(3) Halwa (beer) (class 14)

Mahalwa (types of beer) (class 6)

Some mass nouns only appear with a singular noun class prefix:

(4) Vhuswa (porridge) (class 14)

Some mass nouns only allow a plural prefix:

(5) Maḓi (water) (class 6)

Mafhi (milk) (class 6)

The diminitive suffix **–nyana** may appear with mass nouns with the meaning of a small quantity or amount:

(6) Mpheni maḓinyana

(Please give me a little water)

With count nouns a clause with **–ṱuku** will be needed:

(7) Mpheni maḽegere maṱuku

(Please give me a few sweets)

4.3   SYNACTIC FEATURES OF MASS NOUNS

Count nouns and mass nouns select for different quantifier types. According to Ware (1979:15) the distinction between count nouns and mass nouns is determined by the quantifiers and determines that are appropriate to the nouns. Count nouns are distinguished by their taking enumeratives such as many, few and numerals. Mass nouns are distinguished by a massive words, words like much, little and less. This is a sufficient condition for the distinction between count nouns and mass nouns.

The following quantifiers may plan a role in distinguishing count nouns from mass nouns in

Tshivenḓa:

Numerals:

Numerals only appear with count nouns:

(8) Vhana vhavhili (two children)

Universal quantifier –oṱhe

The quantifier **–oṱhe** is a universal quantifier which refers to all the members of a set in which case the quantity is universal.

When the quantifier **–oṱhe** is combined a count noun in the plural or a mass noun, it has the meaning of a universal quantifier denoting all the members of a set:

With plural count nouns:

(9) Vhanna vhoṱhe vha ḓo vha fhano
     (All the men will be here)

With mass nouns:

(10) Ndi ṱoḓa tshelede yoṱhe
      (I want all the money)

The quantifier **-oṱhe** may also combine with count nouns in the singular. In such cases the quantifier **-oṱhe** denotes the totality of an individual depending on certain syntactic and pragmatic environments in which **-oṱhe** may occur with singular count nouns:

(11) Tshikolo tshoṱhe tsho vala
      (The whole school is closed)

Clauses with –nwe

Such clauses may only appear with singular count nouns and not with mass nouns:

(12) Tshikolo tshiṅwe na tshiṅwe

     (Each school)

The stems –nzhi and ṱuku

The stem **–nzhi** (many/much) will accept both plural count nouns and mass nouns:

(13) Mass noun: Halwa vhunzhi

                    (much beer)

     Count noun: Zwikolo zwinzhi

                    (many schools)

As indicated above **–ṱuku** (few) will only accept plural count nouns:

(14) Zwikolo zwiṱuku

     (a few schools)

There is a second major syntactic difference between count and mass nouns: count nouns and mass nouns allow very different patterns of predication (see Pustejovsky 1996:17), i.e. mass nouns may appear with verbs which will only allow plural subjects such as reciprocal verbs or verbs ending on **–an-**:

(15) Maḓi o ṱangana afha

     (The water met here)

4.4 SEMANTICS OF MASS NOUNS

In the distinction between count nouns and mass nouns, the feature plural has to be carefully distinguished in Tshivenḓa. Nouns in Tshivenda are distinguished morphologically by a

system of paired noun classes. Each noun in Tshivenḓa is specified for a certain noun class and these noun classes are recognized through noun class prefixes. The lexical item **(thu)** may for instance appear with the paired noun class prefixes of class 1 and class 2:

(16) Class 1: Muthu (person)
Class 2: Vhathu (persons)

However, number which includes plural is not a nominal inflectional category of the noun in Tshivenḓa. Number is reflected only in agreement on the verb. In the case of semantics it is clear that provision will have to be made for a feature of plural. Thus, there is a clear distinction in the appearance of the feature plural between morphology and semantics.

Fiengo (1974) distinguished count nouns from mass nouns as follows:

The referents of mass nouns are homogeneous i.e. a piece of gold has parts but it does not have constituents. A piece of gold is itself also gold. The referents of count nouns are non-homogeneous, i.e. a part of a bird is not a bird. Count nouns do have constituents e.g. a bird has feathers, wings etc.

McCawley (1979:165) is of the opinion that the meaning of a count noun specifies an individuation, but that of a mass noun is neutral as to individuation.

Link (1983) referred to the distinction between count and mass nouns as one which holds between sums and collections. His argument about this issue is expressed in the following way: if two expressions (a) and (b) refer to entities occupying the same place at the same time but have different sets of predicates applying to them, then the entities referred to are simply not the same (cf. collective predication and predication involving mass nouns), e.g. a ring and the gold making up a ring are different entities but they are connected by the constitution relation: there is exactly one portion of matter up a ring at a time. See also his distinction which relates to cards:

(17) a. the cards
b. the deck of cards

While the portions of matter denoted by (a) and (b) are the same, the individuals are distinct: (a) refers to the pure collection of objects, and, in many contexts, (b) too refers just to this collection. In general, however, the introduction of a collective term like (b) is indicative of connotations being added enough for it to refer to a different individuals e.g. a committee is not just the collection of its members. Thus, there are pure plural individuals (i.e. sums or plural objects) and collections in the portions-of-matter sense. Sums and collections are similar in that they both are just individuals. Mass nouns from part of collections.

There is a feature which is shared by mass terms and plurals: mass terms have a cumulative reference property. This feature can be imitated by plurals:

(18) a. If (a) is water and (b) is water, then the sum of (a) and (b) is water

   b. If the animals in this camp are horses and the animals in that camp are horses then the animals in both camps are horses (Link 1983).

This view of cumulative references is shared by Pelletier (1979:vii): what mass terms denote are cumulative and dissective, i.e. a mass term is supposed to be true of any sum of things or stuff it is true of, and true of any part of anything of which it is true.

However, Pelletier (1979:8) is sceptical about the semantics of mass terms and he wants to include them in a category of non-sortals. Thus, using semantic criteria to judge whether a word is mass or count will lead to impossible difficulties. Any criterion which concens itself with the nature of the reference of a word will find no interesting differences between e.g. 'thing' and 'water'. The semantic criteria tell us that we should look to the reference of the term in question: if it provides a criterion for counting or if it is not divisive or if it is not collective, then it is sortal, otherwise it is non-sortal. Non-sortals may include, amongst others all the mass nouns.

According to Pustejovsky (1996) there are nouns that have both mass and count interpretations. He dealt with this issue with regard to complementary polysemy: there are nominal alternations that can be described as logical polysemies where the noun seems to have systematically related senses, e.g. a count/mass alternation: in Tshivenda the noun **khuhu** (chicken) may refer to either a count or mass noun:

(19) a. Khuhu i khou gidima tsimuni

(The chicken is running in the field)

b. Sipho o la khuhu nga burekifasi

(Sipho ate chicken for breakfast)

Accoridng to Ware (1979:20) most mass nouns appear to have this alternation: there are words with a double life – sometimes recurring as count nouns and sometimes occurring as mass nouns e.g. road or rope in length of rope, stretch or road. In this last instance the count noun is perceived as a mass noun.

According to Cruse (1986:177) there is a family of relations involved with what things are made of. Such a component may be a mass noun denoting a substance or material. If the whole is also a mass noun, we may speak of constuents or ingredients. Ingredients are those things with which we prepare something e.g. one may speak of the ingredients of some food. The constituents of something are the substances which one may find in some product e.g. alcohol is a constituent of wine, it is not an ingredient of wine.

Thus, mass nouns may appear in a lexical hierarchy i.e. a part-whole hierarchy which is also known as meronomy.

Mass nouns may also have another feature of meronomies which is known as the **substance particle** relation (Cruse 1986). Such a relation is found between a mass noun which is a **whole** and a count noun which is a **part** e.g.

(20) Thoro ya mavhele (a grain of mealies)

Shotha la mvula (a drop of rain)

Mukulo wa maḑi (a mouthful of water)

Gaku ḽa zwiḽiwa (a mouthful of food)

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