7. DENOMINAL VERBS

Apart from unaccusatives, unergative verbs also pose a problem for the relational view of verbhood. Being intransitive, they should be coded syntactically as adjectives, yet they end up being categorized as verbs. Our approach forces us to adopt Hale & Keyser.s (1993, 1998, 2000) theory of unergative verbs as denominal, transitive structures involving a verbalizer and a nominal complement. The implementation I will pursue in this chapter effectively denies their status as lexical verbs. I will show that this position has a number of interesting consequences.

In the introduction it was argued that there are two ways of arriving at verbhood. One is inherent relationality when a concept is associated with two feature clusters. The other is the introduction of thematic structure in order to turn a non-relational concept into a relational one. As we have seen in the previous chapters, with verbs, extra arguments can be added both in the lexicon and syntax. The same should apply to adjectives which constitute a predicative category and possess a θ-grid. In compliance with Theta system, a θ-grid can be manipulated in the lexicon by introducing new arguments but such manipulations are only possible if there is a θ-grid to start with. With adjectives this is indeed the case but not with nouns. Since the latter are non-predicative, operations involving argument structure are inapplicable. Therefore the only way to turn a noun into a verb is in the syntax.

Going back to what has been said in the previous chapters, syntactic derivation is characterized by different attachment levels and unfixed interpretation (no final meaning determination). In this chapter we would like to test the extent to which denominal verb formation complies with these directives. Since adjectives as one-place predicates can be manipulated lexically as well as syntactically, one is offered more flexibility when analyzing deadjectival verbs. Therefore we will restrict attention to denominal verbs only assuming that deadjectival verbs can be derived with more ease.

In terms of morphological composition there are two types of unergative verbs. One is clearly denominal like *ülelee* 'work' or *utuj* 'sleep' consisting of a lexical noun plus a verbalizer. The other is represented by verbs like *xaam* 'walk', *süür* 'run', *ihiir* 'whistle', *ytyrt* 'sneeze', *ytaa* 'cry', *kül* 'laugh' which do not contain a lexical noun. Some of the verbs in the second group consist of a stem only, i.e. are pure verbal roots. Others can be decomposed into a bound root plus a verbalizer. Thus, the second type of unergatives (especially pure verbal roots) presents a real challenge for the current theory.

We will start our discussion with the first, transparently denominal type of unergative verbs. Before this topic is handled in 7.2ff, basic assumptions behind Hale & Keyser's (henceforth H&K) proposal will be recapitulated in 7.1 and adapted to current concerns in 7.1.1. Several type of denominal verbs will be discussed. The first one is LAA-verbs, i.e. verbs derived from nouns with the suffix –LAA. These form the topic of 7.2. In 7.3 argument structure alternations with LAA-verbs will be considered: it will be shown that, as predicted, lexical arity operations are banned with LAA-denominals. 7.4 is devoted to denominal verbs derived with suffixes

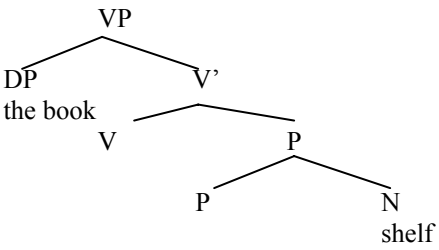
other than –LAA. Unergative verbs of the second type (root verbs and bound roots) are the subject of the last section.

Note that this chapter is largely conjectural poking into a murky area of unergativity in Sakha. Many important issues are therefore put on the back burner. To mention just one, we will leave unattended the question of what derives differences in θ-features between Agent [+c+m]-unergatives (*walk, run, hurry, dance, work*), Theme [-c-m]-unergatives (*glow, shine, babble, click, whistle*) and other unergatives specified as [+m] (*laugh, cry, sleep*) (see section 1.4.3, example (71)).

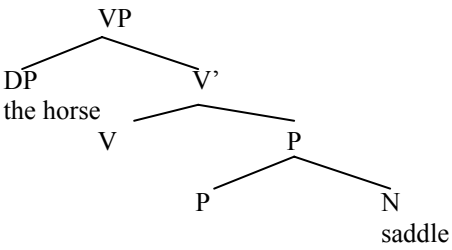
7.1. Recapitulating Hale and Keyser (1993, 1998, 2000)

As described in detail in 1.4.1, H&K explore four alternative avenues of deriving verbs from nouns although eventually the first three get discarded in favour of the last one that there are no denominal verbs. Nevertheless, let's briefly consider all four. One is lexical incorporation defined over lexical relational structures. (1) and (2) repeated from section 1.4.1 show how location and locatum verbs can be derived in the lexicon by incorporating a noun into an empty preposition followed by the incorporation of the N+P complex onto an empty V node.

(1) Location verbs: *shelve, corral, box*



(2) Locatum verbs: *saddle, hobble, blindfold, harness, shoe*



Another avenue which H&K open for nouns on their journey to verbhood is conflation which accompanies the operation of Merge and is defined as a relation between Merge-partners. E.g., an unergative verb like *laugh* results from merging a verbal head with no phonological features, i.e. with a defective p-signature symbolized by ∅ with a noun complement possessing a substantial p-signature

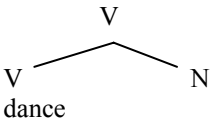
[laugh] as illustrated in (3). Under Merge the nominal p-signature is copied into the empty slot in the verbal head.

(3) Head Complement
{V, [∅]} {N, [laugh]}

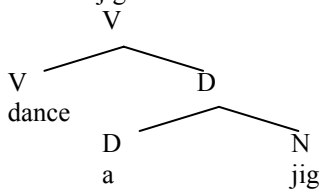
Third option is syntactic incorporation which involves structures like (1) and (2) except that now N→P→V incorporation takes place in the syntax.

A fourth alternative favoured in the end by H&K denies the existence of denominal verbs as such. Instead, it is proposed that the Vocabulary already contains the roots *dance, laugh, saddle, corral*, etc. which are not derived from nouns. Having no category, these roots can be inserted in the V node in (4a-b) appearing with a nominal complement just like *make* in (5).

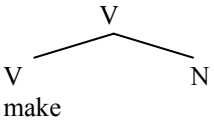
(4) a. John danced.



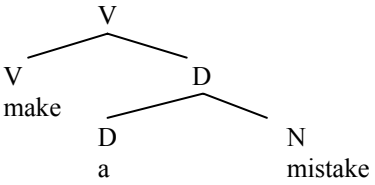
b. John danced a jig.



(5) a. *John made.



b. John made a mistake.



The nominal complement, whether overt or null, must be licensed: in (4b) and (5b) it is licensed as a DP. In (4a) and (5a) it is a bare null N. (4a) is nevertheless grammatical because null N is licensed through the classificatory relationship estabblished between *dance* in V and null N. In other words, *dance*, due to its meaning, is capable of licensing null N by classifying it as a kind of dance. In (5a) bare N cannot be licensed because *make* is devoid of the classifying component. Thus, under this new approach what remains of the original denominal analysis of unergatives is that unergatives have a classifying 'nominal' component as part of their inherent meaning.

7.1.1. Extending H&K's proposal to denominal verb formation in Sakha

As already discussed in 1.4.1, H&K themselves show the untenability of the second, conflation-based analysis because of its failure to explain hyponymous object constructions such as *he danced a jig* or *he bagged the potatoes in a gunnysack*. As for the first analysis - lexical incorporation, it too can hardly be maintained: under any approach, including lexicalist ones, it seems implausible that a process such as

incorporation which has a clearly syntactic nature would be assigned to the lexical component of grammar. This leaves us with two hypotheses - syntactic incorporation and classifying bare roots. Of these, only the former is compatible with the current framework. The latter approach is problematic on conceptual (as we have argued extensively against bare roots in the preceding chapters) as well as empirical grounds. For seemingly monomorphemic verbs like English *dance* the structure in (4a) may seem uncontroversial but not so for bimorphemic *üŋküülee* consisting of the noun *üŋküü* 'dance' plus the verbalizer -LAA.

Thus, it appears that out of the four possibilities outlined by H&K, syntactic incorporation is the most suitable one for denominal verbs. Let's consider in some detail whether the analysis in (1-2) can be applied to Sakha directly, with no modification. H&K make extensive use of P-complements to V as exemplified by (1) and (2), with P's representing zero counterparts of lexical P's. Thus, denominal verbs like *shelve a book* or *saddle a horse* share the same structure with *put (a book on a shelf)* or *provide/fit (a horse with a saddle)*. For instance, if P in (1) were not null, N-incorporation would be blocked explaining the ungrammaticality of **he shelved the books on*.

Since the structures for both location and locatum verbs are identical and their formation proceeds along similar lines, the asymmetry in (6) seems at first sight impossible to derive.

(6) a. Ergis at-y yŋyyr-daa-ta. (locatum)
Ergis horse-acc saddle-verb-past
'Ergis saddled the horse.'
b. *Ergis kinige-ni dolbuur-daa-ta. (*location)
Ergis book-acc shelf-verb-past
'Ergis shelved the book.'

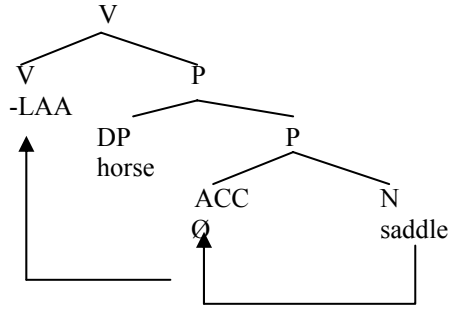
However, if one takes a look at the paraphrases of (6) in (7), different case patterns are revealed. Whereas the accusative case marker can be dropped, the dative one cannot. Furthermore, the interpretation of unmarked accusative 'saddle' in (7a) is highly similar to the interpretation of incorporated 'saddle' in (6a): both are indefinite, non-specific and ambiguous between singular and plural. On the contrary, marked accusative 'saddle' is definite specific singular.

(7) a. Ergis ak-ka yŋyyr-y/yŋyyr ketert-te.
Ergis horse-dat saddle-acc/saddle put-past.3
'Ergis put the/a saddle on the horse.'
b. Ergis kinige-ni dolbuur-ga/*dolbuur uur-da.
Ergis book-acc shelf-dat/*shelf put-past.3
'Ergis put the book on the shelf.'

Taking this semantic similarity as a starting point, the following derivation strictly à la H&K can be advanced. (8) shows a derivation for locatum verbs. What corresponds to English P is a case marker, here ACC which has two variants - null and overt. In incorporating structures the null version is chosen and the noun

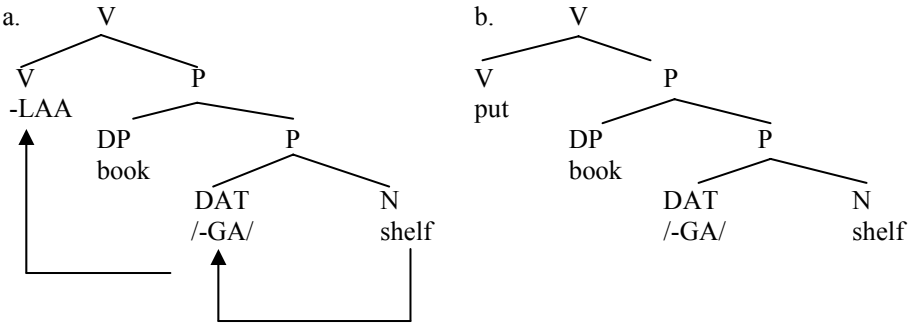
complement can incorporate to P_{ACC} followed by the incorporation of N+P_{ACC} to V deriving *yŋyyrdaa* 'to saddle'.

(8) Locatum (6a): 'Ergis saddled the horse.'



The impossibility of (6b) follows from the structure in (9a) assuming that the dative P is overt and can never be dropped. Thus, (9a) is parallel to English **John shelved the book on*. The partial (boldfaced) structure for (6b) is given in (9a), for (7b) in (9b).

(9) a. *Ergis **kinige-ni dolbuur-daa**-ta
Ergis **book-acc shelf-verb**-past.3
*'Ergis shelved the book on.'
b. Ergis **kinige-ni dolbuur-ga uur**-da
Ergis **book-acc shelf-dat put**-past.3
'Ergis put the book on the shelf.'



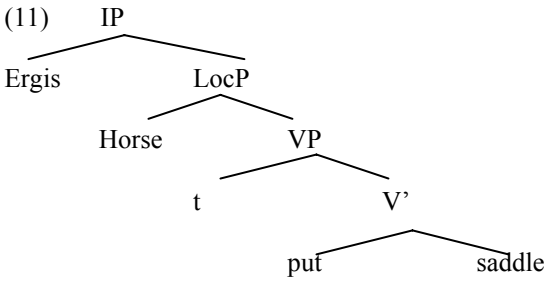
Although this analysis seems plausible, it stumbles upon directional LAA-verbs such as the one in (10a) paraphrasable as (10b). As suggested by the paraphrase, the derivation of *kuorattaa* 'go to the town' in (10a) should involve incorporation of the noun *kuorat* 'town' to P_{DAT} and then to V. In this case the analysis in (9a) cannot be correct.

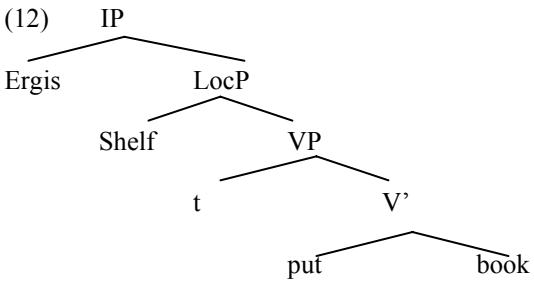
(10) a. Misha kuorat-taa-ta.
Misha town-LAA-past.3
'Misha went to the town.'
b. Misha kuorak-ka bar-da.
Misha town-dat go-past.3
'Misha went to the town.'

Another consideration which contradicts the derivations in (9) is the nature of case markers. The most natural way to treat them is as being spelled out postsyntactically; such treatment is actually the one advanced by DM. If case morphemes are not phonologically specified in the syntax, there should be no difference between P_{ACC} in (8) and P_{DAT} in (9).

Finally, the analysis in (8)-(9) is weakened by the following objection. If incorporation were the only possibility, only verbs built on bare nouns would be encountered. This is not confirmed by the data: LAA-verbs can also be derived from adjective-noun combinations, plural nouns and various kinds of nominal compounds. Their derivation is thus similar to syntactic nominalizations which can target different levels of sentential structure. In the next section we will show at which levels of NP-structure syntactic verbalization takes place and how differences in the levels of application entail differences in interpretation

To begin with, consider the above locatum/location asymmetry in (6). In order to understand the contrast, let's take a look at the full verbal paraphrases of (6) in (7). Assuming that dative locative arguments are licensed in LocP (see section 3.1.2.2), (7a) would have partial representation as in (11) and (7b) as in (12).

(11)


(12)


What is ungrammatical is the LAA-counterpart of (12) in which –LAA has attached to the upper, locative noun 'shelf'. The LAA-counterpart of (11) is o.k. with –LAA attaching to the lower noun 'saddle'. –LAA does have the ability to attach at the level of LocP as witnessed by (10): in (10a) –LAA is suffixed to the noun 'town' which is merged in the specifier of LocP in (10b), the lexical verb paraphrase of (10a). Therefore the reason behind ungrammaticality of (6b) lies not in the attachment possibilities of –LAA but rather in the fact that if –LAA attached at the level of LocP in (12), the lower noun would remain unlicensed. This suggests that if –LAA attached to 'book' in (12) (abstracting away from the presence of the lexical verb), the result would be grammatical as confirmed by (13).

(13) Ergis dolbuur-u kinige-lee-te.
Ergis shelf-acc book-LAA-past.3
'Ergis put a book/books on the shelf.'

Thus, we would like to suggest that attachment possibilities of –LAA depend on the merging order of arguments. If we had a lexical verb like 'put', a VP would be projected and the external and internal arguments would merge, respectively, in the specifier and complement positions. A verbalizing suffix like –LAA is a functional element, a member of the functional lexicon. Since it does not represent a concept (is not a member of the conceptual lexicon), it cannot enter causality relations and therefore cannot become associated with theta features. Therefore, being non-relational and having no arguments, verbalizing elements cannot project a full-fledged phrase and define the merging order of arguments inside this phrase. Instead, what they can do is attach to Ns and NPs and turn them into syntactic verbs. For instance, -LAA can attach to the bare N *kuorat* 'town' resulting in the syntactic verb *kuorattaa* 'town-verb'. This verb can be well-formed all by itself as in (14a): no further arguments need to be introduced. In this case it will receive the interpretation of a weather verb leading to semantic oddness. Whereas with nouns like 'snow', 'rain' and the like, weather interpretation is fine as shown in (14b), with other nouns it is not felicitous, at least in the world that we live in. In an imaginary, fairy tale situation where towns fall from the sky (14a) would be acceptable.

(14) a. #Kuorat-taa-ta.
Town-verb-past.3
#'It towned.'
b. Xaar-daa-ta.
Snow-verb-past.3
'It snowed.'

Thus, whenever a verbalizer attaches to a noun in the syntax, the result is a syntactic verb devoid of any arguments – a no-place verb. However, syntactic argument structure can be introduced with the help of functional projections. One such syntactically introduced argument is the external argument added to a syntactic verb with the help of VoiceP. This is one point where the present model converges with DM but diverges from the original Theta system: in allowing for the syntactic introduction of arguments – in particular, external arguments.

(15) Kesha kuorat-taa-ta.
Kesha town-verb-past.3
'Kesha went to the/a town.'

Apart from external arguments, internal arguments can also be introduced, at most two. One of them will be licensed as dative benefactive, the other one as syntactic accusative KP.

(16) Kesha Misha-qa kinige-ni belex-tee-te.
Kesha Misha-dat book-acc gift-verb-past.3
'Kesha presented Misha with a book.'

Going back to the locatum/location asymmetry, in (6a) the syntactic verb is *yŋyyrdaa* 'saddle-verb' and the introduced arguments are external *Ergis* in Spec,VoiceP subsequently moving to Spec,IP and internal *at* 'horse'. For the time being, it will be tentatively assumed that syntactically introduced internal arguments are merged in Spec,AgrOP where they can receive syntactic accusative case.

As for (6b), the reason it is ungrammatical is interpretive. The subject is merged in Spec,VoiceP and the accusative object in Spec,AgrOP. This structure cannot receive the meaning in (6b) because the noun *dolbuur* 'shelf' is incorporated to the verbalizer: the meaning in (6b) can only arise if 'shelf' were merged in Spec,LocP. Assuming that LocP is projected above AgrOP (sentential architecture being determined by the UG), at the level of semantic interpretation this syntactic hierarchy must be respected. In particular, the semantic component cannot assign to (6b) an interpretation as if 'shelf' were located in the specifier of LocP. (6b), however, can be read as 'Ergis assigned a shelf to the book' if e.g. Ergis works as a librarian: crucially, under this reading (6b) is felicitous both if Ergis puts the book on the shelf or does not.

7.2. Denominal LAA-verbs

The most productive and universal verbalizer is –LAA[1]. Its universality is witnessed by its ability to attach not only to nouns (and adjectives) but also to cardinal and ordinal numerals (17), adverbs (18), interjections (19), interrogative and quantifying demonstrative pronouns (20). (21) shows some examples of de-pronominal LAA-verbs in usage.

(17) *Ikki* 'two' *Ikkilee* 'do two times; provide with two'
Ikkis 'second' *Ikkistee* 'do for the second time, become second'

(18) *Erde* 'early' *Erdelee* 'do something early, come early'
Nahaa 'very, too much' *Nahaalaa* 'overdo it, go too far'

[1] -LAA contains another verbalizer –AA which has restricted use in modern language. –AA is also encountered in the verbalizer –rGAA which is also not productive. We will leave –AA and –rGAA out of discussion.

Urut ‘before, previously’ *Uruttaa* ‘do smth. ahead of smb./smth.’

(19) LAA-verbs derived from interjections:

Ajykka	(Interjection of) Pain	Ajykkalaa	Express pain
Ycca	Cold	Yccalaa	Shiver with cold
Huu	Fear; surprise; relief	huulaa	Shout with fear; express surprise; sigh with relief; frighten/surprise
Haj	For driving cattle	hajdaa	Drive cattle
Tüksü	Enough	Tüksülee	Stop

(20)

Tuox ‘what’	*Tuoxtaa* ‘do what, provide with what’
Töhö ‘how much’	*Töhölöö* ‘count/number how much, do/perform/go through how much’
Xanna ‘where’	*Xannalaa* ‘go where’
Xas ‘how many’	*Xastaa* ‘do how many times’
Xahys ‘which’	*Xahystaa* ‘do which time, become which number’
Bacca ‘this much’	*Baccalaa* ‘do this much, provide with this much’
Occo ‘that much’	*Occoloo* ‘do that much, provide with that much’

(21) a. En sommun tuox-taa-ty-ŋ?
You my.coat-acc what-LAA-past-2sg
‘What did you do with my coat?’

b. Mende xanna-laa-ta?
Mende where-LAA-past.3
‘Where did Mende go?’

c. Üleqin töhö-löö-tü-ŋ?
Your.work-acc how.much-LAA-past-2sg
‘How much of your work have you finished?’

Apart from productivity and universality, the syntactic status of the suffix –LAA receives support from a wide range of variability in meanings assigned to denominal LAA-verbs. As argued above, e.g. in chapter 2, it is a property of syntactic derivation that it allows contextual determination of meaning, as opposed to lexical derivation which fixes meaning once and for all. How N-LAA combinations will be interpreted depends on the meaning of the incorporated noun, on how many additional arguments are introduced syntactically, on the level of LAA-attachment (bare N or NP, AP-NP, NumP-NP). This becomes evident from the semantic classification given in the following subsections. Consider for instance the verb *xaardaa* ‘snow-verb’. If no (14b) or only one (22a) argument is introduced, it is interpreted as a weather verb. If the sole additional argument is human (or animate), *xaardaa* can also be interpreted as in (22b). If two extra arguments are added, *xaardaa* receives the meanings in (22c).

(22) a. Xallaan xaar-daa-ta.
Sky snow-verb-past.3 'The sky snowed.'
b. Misha xaar-daa-ta.
'Misha took a handful/mouthful of snow.'
'Misha was affected by snow (e.g. became sick).'
c. Misha telgehe-ni xaar-daa-ta.
Misha courtyard-acc snow-verb-past.3
'Misha cleared the courtyard from the snow.'
'Misha filled/layered the courtyard with snow.'

We will assume that there is nothing special about cognate objects: they are just like any other object licensed in Spec,AgrOP and assigned syntactic accusative case. Whether a syntactic verb allows a cognate object or not is predictable from the meaning. For instance, N-LAA verbs with the meaning 'hunt/gather N' do allow cognate objects (N N-LAA: *balyk balyktaa* 'fish fish-verb; catch fish') but not those with the meaning 'use N as instrument'. This is as expected: you can hammer a wall but you can hardly hammer a hammer

The semantic classification below also depends on the attachment level of N. For example, the meaning 'provide with N' is more flexible than 'use N as instrument': in the former the noun can be plural or modified but not in the latter. Again, this is expected: although sharpness/bluntness of a knife affects its efficiency as an instrument, there are no two instruments like a sharp knife versus a blunt knife. Similarly, in (23-24) there is only one instrument – a whip, singular and unmodified. The table in (25) gives a summary indication of meanings, cognate objects and N-restrictions (whether the incorporated N can be plural and modified or must be bare).

(23) Aqa oqo-nu kymnjyy-laa-ta.
Father child-acc whip-verb-past.3
'Father gave the child a whip' (provide with N)
'Father whipped the child' (use N as instrument)

(24) Aqa oqo-lor-u uhun kymnjyy-lar-daa-ta.
Father child-pl-acc long whip-pl-verb-past.3
'Father gave the children long whips' (provide with N)
*'Father whipped the children with long whips' (use N as instrument)

(25) N-LAA verbs: Meanings and restrictions on N

Meaning	Modified N	Plural N	Cognate object
1. Provide with N	Yes	Yes	No
2. Apply N (use N as instrument)	No	No	No
3. Remove N	No	No	Yes
4. Make/hunt/gather N	No	No	Yes
5. Look after N	No	No	Yes
6. Consume N	No	No	Yes

7. Imitate N, act/work as N	Yes	No	No
8. Go in the direction of N	Yes	No	No
9. Secrete/discharge N	Yes	No	Yes
10. Play N	No	No	No
11. Weather N	No	No	No

7.2.1. "Provide with N"

N	N-Gloss	V	V-Gloss
Xarcy	Money	Xarcylaa	Give money
Tuus	Salt	Tuustaa	Salt
Silim	Glue	Silimnee	Glue
Aryy	Butter	Aryylaa	Butter

Verbs with this meaning are transitive, i.e. have two additional arguments: one merged in Spec,VoiceP and another merged in Spec,AgrOP. They do not allow cognate objects. The incorporated noun may be modified and plural.

(26) a. Sargy Mende-ni timir xarcy-laa-ta.
Sargy Mende-acc iron money-verb-past.3
'Sargy gave Mende coins.'

b. Sargy oqo-lor-u kyhyl, saharxaj, küöx sharik-tar-daa-ta.
Sargy child-pl-acc red, yellow, blue/green balloon-pl-verb-past.3
'Sargy gave the children red, yellow, blue/green balloons.'

7.2.2. "Apply N (Use N as an instrument)"

N	N-Gloss	V	V-Gloss
Ötüje	Hammer	Ötüjelee	Hammer
Kymnjyy	Whip	Kymnjyylaa	Whip
Siide	Sieve	Siidelee	Sieve
Öj	Intelligence	Öjdöö	Understand, remember
Bya	Rope	Byalaa	Tie with a rope
Tohoqo	Nail	Tohoqoloo	Nail

Verbs with this meaning are transitive. Cognate objects are not allowed. The incorporated noun cannot be plural or modified (see (24) above).

7.2.3. "Remove N"

N	N-Gloss	V	V-Gloss
Xaar	Snow	Xaardaa	Remove snow
Xax	Skin	Xaxtaa	Peel
Xatyryk	Scale, bark	Xatyryktaa	Remove scale/bark
Byrdax	Mosquito	Byrdaxtaa	Clear from/kill mosquitoes

Verbs in this group are transitive. The incorporated noun cannot be modified (27a) or plural (27b). Cognate objects are allowed (27c).

(27) a. Mende uulussa-ny (*kirdeex) xaar-daa-ta.
Mende street-acc (*dirty) snow-verb-past.3
'Mende removed (*dirty) snow from the street.'
b. Mende balyk-tar-y xatyryk-taa-ta/*xatyryk-tar-daa-ta.
Mende fish-pl-acc scale-verb-past.3/*scale-pl-verb-past.3
'Mende scaled the fish.'
c. Mende kirdeex xaq-y xax-taa-ta
Mende dirty skin-acc skin-verb-past.3
'Mende removed the dirty skin.'

7.2.4. "Make/Hunt/Gather N"

N	N-Gloss	V	V-Gloss
Alaadjy	Pancake	Alaadjylaa	Make pancakes
Djedjen	Strawberry	Djedjennee	Pick strawberries
Tellej	Mushroom	Tellejdee	Pick mushrooms
Kus	Duck	Kustaa	Hunt ducks

The incorporated noun cannot be plural and cannot be modified.

(28) a. *Ookko alaadjy-lar-daa-ta.
Ookko pancake-pl-verb-past.3
b. *Ookko minnjiges alaadjy-laa-ta.
Ookko delicious pancake-verb-past.3

7.2.5. "Look after N"

N	N-Gloss	V	V-Gloss
Süöhü	Cattle	Süöhülee	Look after cattle
Djie	House	Djielee	Do housekeeping
Oqo	Child	Oqoloo	Babysit

Verbs in this group are transitive (29a), the incorporated noun cannot be plural (29b) and modified (29c).

(29) a. Sardaana Misha-ny oqo-loo-to.
Sardaana Misha-acc child-verb-past.3
'Sardaana babysitted Misha.'
b. *Sardaana menik kulun-cuk-taa-ta.
Sardaana naughty foal-dimin-verb-past.3
Intended meaning: 'Sardaana looked after naughty foals.'
c. *Sardaana kuluncuk-tar-daa-ta.

Sardaana foal-pl-verb-past.3
Intended meaning: 'Sardaana looked after several foals.'

7.2.6. "Consume N"

N	N-Gloss	V	V-Gloss
Cej	Tea	Cejdee	Drink tea
Tabax	Tobacco	Tabaxtaa	Smoke
Uu	Water	Uulaa	Drink water

The incorporated noun must be bare. Cognate objects are possible.

(30) Ookko omuk tabaq-yn tabax-taa-ta.
Ookko foreign tobacco-3.acc tobacco-verb-past.3
'Ookko smoked imported tobacco.'

7.2.7. "Imitate N; Act/Work like N"

N	N-Gloss	V	V-Gloss
At	Horse	Attaa	Go down on all fours
Turuja	Crane	Turujalaa	Walk/cry like a crane
Suor	Raven	Suordaa	Cry like a raven
Studen	Student	Studennaa	Be a student
Emcit	Doctor	Emcittee	Work as a doctor

Verbs in this group are intransitive. Cognate objects are not allowed. The incorporated noun can be neither modified nor plural.

(31) a. Keskil (*menik) kuluncuk-taa-ta.
Keskil naughty foal-verb-past.3
'Keskil jumped around like a (*naughty) foal.'
b. Kiniler studen-naa-ty-lar / *studen-nar-daa-ty-lar.
They student-verb-past-pl / *student-pl-verb-past-pl
'They were students.'

7.2.8. "Go in the direction of N"

N	N-Gloss	V	V-Gloss
Djie	Home	Djielee	Go home
Üle	Work	Ülelee	Go to work
Alaaska	Alaska	Alaaskalaa	Go to Alaska
Tya	Countryside	Tyalaa	Go to the countryside

Verbs in this group are intransitive. No cognate objects are allowed. The incorporated noun can be modified but cannot be plural.

(32) Mende soquruu dojdu-laa-ta.
Mende southern country-verb-past.3
'Mende went to a southern country.'

7.2.9. "Secrete/discharge N"

N	N-Gloss	V	V-Gloss
Sil	Saliva	Sillee	Spit
Symyyt	Egg	Symyyttaa	Lay eggs
Kulun	Foal	Kulunnaa	Give birth to a foal
Torbos	Calf	Torbostoo	Give birth to a calf[2]
Tüü	Fur	Tüülee	Shed fur

Cognate objects are allowed (33a). The incorporated noun can be modified (33b) but not plural (33c):

(33) a. Kuurussa ulaxan symyyt-y symyyt-taa-ta.
Hen big egg-acc egg-verb-past.3
'The hen laid a large egg.'
b. Kuurussa kyhyl kömüs symyyt-taa-ta.
Hen red gold egg-verb-past.3
'The hen laid a golden egg/eggs.'
c. *Kuurussa symyyt-tar-daa-ta.
Hen egg-pl-verb-past.3
Intended meaning: 'The hen laid several golden eggs.'

7.2.10. "Play N"

N	N-Gloss	V	V-Gloss
Xaarty	Cards	Xaartylaa	Play cards
Xabylyk	A kind of game	Xabylyktaa	Play the game 'xabylyk'
Futbuol	Football	Futbuollaa	Play football
Kyryympa	Violin	Kyryympalaa	Play violin
Xomus	Mouth harp	Xomustaa	Play mouth harp

Verbs in this group are intransitive. Cognate objects are not allowed (34a). The incorporated noun can be neither modified (34b) nor pluralized (34c):

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[2] *Kulunnaa* 'give birth to a foal' and *torbostoo* 'give birth to a calf' are only used if some abnormalities are involved. In the second case this is reflected by using the noun *torbos* instead of *njirej* 'newborn calf': usually *njirej* first grows to become *torbujax* and only then *torbos*.

a. Bie kulun-naa-ta.
Mare foal-verb-past.3
'The mare gave birth to a deficient foal.'
b. Ynax torbos-too-to / *njirej-dee-te.
Cow calf-verb-past.3 / *newborn.calf-verb-past.3
'The cow gave birth to a deficient calf.'

(34) a. Mende (*kyryympa-ny) kyryympa-laa-ta.
Mende (*violin-acc) violin-verb-past.3
'Mende played a violin.'
b. Mende (*saŋa) kyryympa-laa-ta.
Mende (*new) violin-verb-past.3
'Mende played a (*new) violin.'
c. *Mende kyryympa-lar-daa-ta.
Mende violin-pl-verb-past.3
Intended meaning: 'Mende played several violins.'

7.2.11. Weather verbs

N	N-Gloss	V	V-Gloss
Ardax	Rain	Ardaxtaa	To rain
Xaar	Snow	Xaardaa	To snow
Kuraan	Drought	Kuraannaa	Become droughty
Xalaan	Flood	Xalaannaa	To flood
Toburax	Hail	Toburaxtaa	To hail

Verbs in this group are intransitive. Cognate objects/subjects are not allowed (35a); non-cognate subjects are allowed. The incorporated noun cannot be modified (35c) or plural (35d).

(35) a. (*Xaar/*Xaar-y) Xaar-daa-ta.
(*snow/*snow-acc) snow-verb-past.3
'It(/*snow) snowed (*a snow).'
b. Örüs xalaan-naa-ta. / Xallaan ardax-taa-ta.
River flood-verb-past.3 / Sky rain-verb-past.3
'The river flooded.' / 'The sky rained.'
c. *Maŋan xaar-daa-ta.
White snow-verb-past.3
d. Xalaan(*-nar)-daa-ta.
Flood(*-pl)-verb-past.3 'It flooded.'

7.2.12. Summary

We have argued that a denominal verb like *ülelee* is derived syntactically by attaching the suffix –LAA to the noun *üle* 'work'. Being derived in the syntax, the verb does not have a fixed meaning which varies, depending on the context, between 'provide with work', 'go to work' and 'work'. It is the latter meaning which corresponds to the typical English unergative verb 'to work'. Under the usual analysis of unergatives what sets them apart from other types of verbs is that their sole argument is merged externally. Under the proposed analysis this follows from the fact that the external argument of *ülelee* 'to work' is introduced syntactically and merged in the specifier of VoiceP.

7.3. Denominal verbs, arity operations and accusative case

Denominal verbs, being derived in the syntactic component, cannot be subjected to lexical arity operations. Syntactic arity operations, however, should be possible. In this section we will show that this prediction holds true with respect to reflexivization, expansion and reciprocalization.

7.3.1. Reflexivization: Lexical and syntactic bundling

Consider first reflexivization proper which was argued in chapter 6 to involve a lexical operation. Indeed, syntactic denominal verbs cannot undergo lexical bundling. Out of the eleven meanings discussed in section 7.2, four are semantically compatible with reflexive predicate formation. However, they cannot be reflexivized with the suffix –n: for them the only option of arriving at a reflexive interpretation is through the self-anaphor *beje* and n-marking is banned. The meanings in question are 'provide with N', 'use N as instrument', 'remove N', 'look after N'. Note that the examples in (36c), (37c), (39c) are not ungrammatical: they are only infelicitous with the intended reflexive readings. They do have a second meaning considered shortly which renders them well-formed.

(36) 'Provide with N':
- a. Kesha Misha-ny xarcy-laa-ta/djie-lee-te.
  Kesha Misha-acc money-verb-past.3/house-verb-past.3
  'Kesha provided Misha with money/housing.'
- b. Kesha beje-tin xarcy-laa-ta/djie-lee-te.
  Kesha self-3.acc money-verb-past.3/house-verb-past.3
  'Kesha provided himself with money/housing.'
- c. Kesha xarcy-la-n-na/djie-le-n-ne.
  Kesha money-verb-refl-past.3/house-verb-refl-past.3
  *'Kesha provided himself with money/housing.'

(37) 'Use N as instrument':
- a. Kesha Misha-ny öj-döö-tö/kymnjyy-laa-ta.
  Misha Misha-acc intelligence-verb-past.3/whip-verb-past.3
  'Kesha understood/whipped Misha.'
- b. Kesha beje-tin öj-döö-tö/kymnjyy-laa-ta.
  Misha self-3.acc intelligence-verb-past.3/whip-verb-past.3
  'Kesha understood/whipped himself.'
- c. Kesha öj-dö-n-nö/kymnjyy-la-n-na.
  Misha intelligence-verb-refl-past.3/whip-verb-refl-past.3
  *'Kesha understood/whipped himself.'

(38) 'Remove N':
- a. Kesha Mishany byrdax-taa-ta.
  Kesha Misha-acc mosquito-verb-past.3
  'Kesha killed mosquitoes around/on Misha'

b. Kesha beje-tin byrdax-taa-ta.
Kesha self-3.acc mosquito-verb-past.3
'Kesha killed mosquitoes around/on himself.'
c. *Kesha byrdax-ta-n-na.
Kesha mosquito-verb-refl-past.3

(39) 'Look after N':
a. Kesha Misha-ny oqo-loo-to.
Kesha Misha-acc child-verb-past.3
'Kesha nursed (babysitted, pampered) Misha.'
b. Kesha beje-tin oqo-loo-to.
Kesha self-3.acc child-verb-past.3
'Kesha pampered himself.'
c. Kesha oqo-lo-n-no.
Kesha child-verb-refl-past.3
*'Kesha pampered himself.'

Next, syntactic bundling which derives benefactive reflexives (40) and inalienable possession reflexives (41) can apply to denominal verbs.

(40) a. Misha (beje-tiger) alaadjy-la-n-na/miin-ne-n-ne.
Misha (self-3.dat) pancake-verb-refl-past.3/soup-verb-refl-past.3
'Misha made pancakes/cooked soup for himself.'
b. Misha miin-in tuus-ta-n-na.
Misha soup-3.acc salt-verb-refl-past.3
'Misha salted his soup.'
c. Misha taŋah-yn abyrax-ta-n-na.
Misha clothes-3.acc patch-verb-refl-past.3
'Misha put patches on (mended) his clothes.'

(41) a. Misha sirej-in aryy-la-n-na/ilii-tin krem-na-n-na.
M. face-3.acc butter-verb-refl-past.3/hand-3.acc cream-verb-refl-past.3
'Misha buttered his face/put cream on his hands.'
b. Misha baah-yn em-te-n-ne.
Misha wound-3.acc medicine-verb-refl-past.3
'Misha cured his wound.'
c. Misha ataq-yn byrdax-ta-n-na
Misha leg-3.acc mosquito-verb-refl-past.3
'Misha killed mosquitoes on his leg.'
d. Misha beje-tin xaar-da-n-na
Misha self-3.acc snow-verb-refl-past.3
'Misha removed snow from himself.'

7.3.1.1. Denominal verbs ending in –LA-N

As mentioned above, the examples in (36c), (37c) and (39c) are not ungrammatical: it is the intended proper reflexive meaning which makes them ill-formed. As shown below, assigning them a different meaning makes them well-formed.

(42) Kesha xarcy-la-n-na/djie-le-n-ne.[3]
Kesha money-verb-refl-past.3/house-verb-refl-past.3
*'Kesha provided himself with money/housing.'
But: 'Kesha came into possession of money/housing.'

(43) Kesha öj-dö-n-nö/kymnjyy-la-n-na.
Misha intelligence-verb-refl-past.3/whip-verb-refl-past.3
*'Kesha understood/whipped himself.'
But: 'Kesha came to his senses/came into possession of a whip.'

(44) Kesha oqo-lo-n-no.
Kesha child-verb-refl-past.3
*'Kesha pampered himself.'
But: 'Kesha fathered a child.'

The above three examples do not imply any agentivity which is typical of proper reflexive predicates. If (42) is compared to (36b), the two differ truth-conditionally. (36b) implies that Kesha intentionally exerted effort to earn some money or that he earned money in order to buy a house. As a result, he came into possession of money or housing. In (36b) it is only Kesha who is responsible for his acquisitions. In contrast, (42) has no such implications. Here the only thing that matters is the result, namely, that Kesha somehow came into possession of money and housing: it is of no importance how. It is possible that he earned it on his own but it is also possible that someone gave him everything. Similarly in (37b) and (43) with respect to *öjdöö* 'understand': mental exertion is present only in (37b) and what is emphasized is this psychological work which brings about self-understanding. In (43) with *öjdö-n* 'understand-refl' no mental work is implicated: only the result (character change) is stressed. As for *kymnjyylaa* 'whip', in (37b) and (43) we have completely different meanings – in contrast to the examples just considered whose meanings are comparable. Whereas in (37b) Kesha intentionally whips himself, in (43) the instrumental reading disappears: all that (43) says is that Kesha somehow acquired a whip.

The same considerations extend to the contrast between (39b) and (44). The former with the self-anaphor and no n-marking means 'Kesha pampered himself', the latter has n-marking but no self-anaphor and an entirely different meaning – 'Kesha became a father'. (39b) is agentive, (39c)/(44) is not. The meaning 'to become a parent of' derived with –LA-N is quite productive with nouns denoting various kinds of offspring, cf. (45a) which can be compared to the examples in

[3] For convenience we will continue glossing the suffix –n- as "-refl-".

footnote 2 above derived with –LAA repeated in (45b). Whereas (45a) denotes a natural process, (45b) is perceived as denoting something abnormal. Therefore –LAA deriving the meaning 'to become a parent of' is very restricted whereas –LA-N deriving the same meaning is very productive.

(45) a. Bie kulun-na-n-na. / Ynax njirej-de-n-ne.
Mare foal-verb-refl-past.3 / Cow calf-verb-refl-past.3
'The mare/The cow had a foal/calf.'
b. Bie kulun-naa-ta. / Ynax torbos-too-to.
Mare foal-verb-past.3 / Cow calf-verb-past.3
'The mare/The cow had an abnormal/deficient foal/calf.'

These facts suggest that –LA-N is a morpheme independent from –LAA, i.e. it is not the case that whenever we encounter a denominal verb bearing the suffix –LA-N this verb should have been derived from the corresponding –LAA verb with the help of n-marking. Thus, *öjdön* 'come to senses' is not derived from *öjdöö* 'understand' just as *kulunnan* 'give birth to a (normal) foal' is not derived from *kulunnaa* 'give birth to an abnormal foal'. Rather, *öjdön* and *kulunnan* are derived from the nouns *öj* 'intelligence' and *kulun* 'foal' with –LA-N while *öjdöö* and *kulunnaa* are derived from the same nouns with –LAA.

Thus, we are assuming that –LAA and –LA-N are two separate functional morphemes which attach to nouns in the syntax and derive syntactic denominal verbs. When the suffix attached is –LAA, there are no restrictions on the transitivity of the derived verb: it can be a weather verb in which case no further arguments need to be introduced; alternatively, functional heads (Voice, Ben, AgrO) may be projected licensing extra syntactic arguments.

When the suffix attached is –LA-N, only one external argument may be added. The addition of the reflexive suffix –n to –LAA prevents further projection of arguments other than the external one. In particular, no accusative internal argument may be licensed[4]. That the sole argument of LA-N-verbs is merged externally testifying to their unergative status is witnessed from the fact that LA-N verbs can undergo causativization and passivization – two operations which require the presence of an external argument and which are therefore banned with unaccusative verbs.

(46) a. Olox Misha-ny öj-dö-n-nör-dö.
Life Misha-acc intelligence-verb-refl-caus-past.3
'Life made Misha come to his senses.'
b. Djie-le-n-ilin-ne. / Xarcy-la-n-ylyn-na.
House-verb-refl-pass-past.3 / Money-verb-refl-pass-past.3
'There were an event(s) of acquiring housing/money.'

[4] Although the suffix –n cannot mark an operation affecting the argument structure of [[Noun]-LAA] so we don't get [[[Noun]-LAA]-N], it appears capable of affecting –LAA directly yielding [[Noun]-LA-N]. Thus, when –n attaches to –LAA, it seems to perform the same function as when it attaches to regular (lexical) verbs. At this point we shall leave unattended this intriguing matter of how interaction between functional morphemes resulting in argument structure alternations of the derived verb should be encoded in Theta system.

7.3.2. Causativization

As mentioned in the previous section, denominal LAN-verbs can be causativized as in (46a). (46a) shows that the causer argument added is not an agent but cause which means that expansion in (46a) cannot be lexicon-internal: if it were an instance of lexical causativization, it would have to be agentivization as argued in chapter 5. Another argument for the syntactic status of causativization with denominal verbs is the fact that the underlying external argument does not have to specified as [+c]: with lexical causativization such a requirement is present because lexical causativization is a two-step operation, the first step being decausativization. (46a) is derived from (43) where the external argument is not [+c]. Some more examples of causativized denominal verbs are given in (47).

(47) a. Kyhalqa Misha-ny üle-le-t-te.
Need Misha-acc work-verb-caus-past.3
'Poverty made Misha work.'
b. Muus balyk-ta-p-pa-ta.
Ice fish-verb-caus-neg-past.3
'Ice prevented from fishing.'
c. Kiine oloq-u öj-dö-t-ör.
Cinema life-acc intelligence-verb-caus-aor
'Cinema helps understand life.'

7.3.3. Reciprocal formation

As argued in chapter 6, reciprocal formation proceeds along either lexical or syntactic modes. The lexical mode of reciprocalization entails case reduction, syntactic reciprocalization does not. As revealed by the reciprocity diagnostics below, denominal verbs can only give rise to syntactic reciprocal verbs confirming once again the prediction that syntactically derived denominal verbs cannot possibly undergo arity operations inside the lexicon.

First, as shown in (48), case is not reduced. In (48a) the accusative reciprocal anaphor is allowed. In (48b) there is an overt accusative DP object, in (48c) – overt dative DP.

(48) a. Misha uonna Masha beje beje-ler-in öj-dö-h-öl-lör.
Misha and Masha self self-pl-3.acc intelligence-verb-rec-aor-pl
'Misha and Masha understand each other.'
b. Misha uonna Masha miin-ner-in tuus-ta-s-ty-lar.
Misha and Masha soup-pl-3.acc salt-verb-rec-past-pl
'Misha and Masha salted each other's soup.'
c. Misha uonna Masha oqo-lor-ugar alaadjy-la-s-ty-lar.
Misha and Masha child-pl-3.dat pancake-verb-rec-past-pl
'Misha and Masha made pancakes for each other's children.'

Second, syntactic reciprocals cannot be discontinuous and they cannot appear in the singular with only one argument (see 6.7.2).

(49) *Misha Masha-lyyn em-te-s-te/xarys-ta-s-ta/tuha-la-s-ta/belex-te-s-te.
M. M.-with cure-v-s-past/care-verb-rec-past/use-verb-rec-past/gift-v-s-past

(50) *Misha em-te-s-te/xarcy-la-s-ta/tuha-la-s-ta/futbuol-la-s-ta/belex-te-s-te.
M. cure-v-s-past/money-v-s-past/use-v-s-past/football-v-s-past/gift-v-s-past

To summarize, we have shown in 7.3 that denominal verbs can only undergo syntactic arity operations. Their inability to undergo lexical arity operations follows from their derivational history which is entirely syntactic.

7.4. Denominal verbs ending in suffixes other than –LAA

Apart from LAA- and LAN-verbs, nouns can be verbalized with a number of other suffixes (see appendix 3, section 4). These suffixes can be divided into two groups based on their productivity and regularity. As will be shown, the two types correlate with the two loci of derivation – lexicon and syntax.

7.4.1. Sporadic suffixes

Among highly unproductive suffixes are simplex /–j/, /-r/, /-n/, /-t/ and complex /–AA-j/ and /–AA-r/. Verbs derived with these suffixes do not behave like syntactically derived LAA-verbs. First, they can only attach to bare nouns. Second, the meaning of the derived verb cannot fluctuate and is fixed once and for all: *ytyr* derived from *yt* ‘dog’ can only mean ‘bite’ and cannot mean ‘behave like a dog’, ‘bark’, etc. In addition, the relationship between the base noun and the derived verb is irregular in many cases. The base noun may be archaic or extremely infrequent whereas its verbal derivative is characterized by high lexical frequency. For instance, *bas* ‘head’, *kös* ‘eye’, *kierge* ‘jewel’, *tus* ‘side, direction’ are archaic nouns. Yet, their derivatives *bahyj* ‘master’, *köhün* ‘appear’, *kierget* ‘decorate’, *tuhaaj* ‘direct, point at’ are neither archaic nor infrequent. Similar situation arises with the nouns *baqa* ‘desire’, *cocu* ‘whetstone’, *kyha* ‘hearth, crucible’, *yar* ‘difficulty’ having low frequency but yielding commonly used verbs *cocuj* ‘improve, perfect; sharpen’, *kyhaj* ‘force, urge, spur’, *kyhan* ‘do one’s best’, *yaryj* ‘become sick’, *yaryt* ‘make sick’. As a result, the derivational link between the noun and the verb is often broken and the existence of such a link is not realized by many speakers. For instance, it is possible to have in one’s vocabulary the verbs *cocuj* ‘improve, perfect; sharpen’, *kyhaj* ‘force, urge, spur’, *kyhan* ‘do one’s best’ without simultaneously having the nouns *cocu* ‘whetstone’ and *kyha* ‘hearth, crucible’ from which the verbs in question are historically derived.

As argued in chapter 2, properties like these are typical of lexicon-internal derivation. Therefore we will assume that these cases present instances of frozen lexical denominal verb formation. Given their finite number, they should not pose problems for learnability.

7.4.2. Productive suffixes

Two suffixes will be considered: 1) /-TYj/ which has variants /-sYj/, /-lYj/, /-nYj/ and 2) /–msYj/. It will be argued that /-TYj/- and /-msYj/-suffixation has syntactic status. For the first suffix this assumption receives support from the presence of some degree of meaning fluctuation with verbal derivatives as well as from the fact that the suffix can attach not only bare nouns but also to regular (i.e. non-idiomatic) AP-NP combinations (52)-(53).

(51) a. Misha aba-tyj-da.
Misha bitterness-verb-past.3
'Misha became annoyed.'
b. Iŋse aba-tyj-da.
Greed bitterness-verb-past.3
'Greed turned into bitterness.'

(52) a. Misha myndyr oqonnjor-suj-ar.
Misha wise old.man-verb-aor
'Misha is pretentiously behaving like a wise old man.'
b. Baas kuhaqan iriŋe-tij-bit
wound bad pus-verb-past
'The wound is exuding bad pus.'
c. Ulaxan kihi er-eeri Misha kyra oqo-tuj-but.
Big person aux-ger Misha small child-verb-past
'Though a grown-up adult, Misha became like a small child.'

(53) a. Timir ihit djebin-nij-bit.
Iron casserole rust-verb-past
'The iron casserole became rusty.'
b. Timir ihit kyhyl djebin-nij-bit.
Iron casserole red rust-verb-past
'The iron casserole became covered with red rust.'

The second suffix /–msYj/ derives attitudinal verbs with an entirely compositional meaning 'pretend to be/act like N' with a negative connotation. Besides semantic transparency, another argument for the syntactic status of the suffix is the possibility of its attachment to AP-NP structures.

(54) a. Misha Lena-laax-xa maany yaldjyt-ymsyj-ar.
Misha Lena-assoc-dat dear guest-verb-aor
'Misha behaves like a dear guest at Lena's place.'
b. Misha üöreneecci-ler-ge ulaxan tojo-msuj-ar.
Misha pupil-pl-dat big boss-verb-aor
'Misha behaves like a big cheese towards the children.'
c. Akaary njire-msij-ime!
Stupid calf-verb-neg
'Stop acting naïve (like a stupid calf)!'

7.5. Unergative verbal roots and unergative verbs as √-suffix combinations

As mentioned in the beginning of this chapter, the second type of denominal verbs is represented by verbal roots like *xaam* 'walk', *süür* 'run', *kül* 'laugh' and √-suffixes like *ihiir* 'whistle', *ytyrt* 'sneeze', *ytaa* 'cry'. What is interesting about these verbs is that even though they are unergatives, they are nevertheless possible with accusative objects as shown in (55).

(55) a. Bihigi uhun suol-u xaam-ty-byt.
We long road-acc walk-past-1pl
b. Misha ikki kilometr-y süür-de.
Misha two kilometer-acc run-past.3
c. Misha Masha-ny kül-le.
Misha Masha-acc laugh-past.3
d. Misha yrya-ny ihiir-de.
Misha song-acc whistle-past.3

What is even more important for the current theory is that these verbs are transitive already in the lexicon. Their lexical transitivity is betrayed under causativization. As demonstrated in (56), the introduced causer can only be agentive and cannot be inanimate which is only possible if causativization in (56) is lexical. The preservation of the accusative internal argument under lexical causativization can only be explained if the internal argument had been there to start with.

(56) a. Sardaana/*Tymnyy/*Xahyy bihigi-ni bies kilometr-y süür-der-de.
Sardaana/*Cold/*Yell we-acc five kilometer-acc run-caus-past.3
b. Misha/*Kymnjyy ynaq-y ikki kilometr-y xaam-tar-da.
Misha/*Whip cow-acc two kilometer-acc walk-caus-past.3
c. Lena/*Aba/*Kyhyy Misha-ny Masha-ny kül-ler-de.
L./*Bitterness/*Annoyance M.-acc Masha-acc laugh-caus-past.3
d. Lena/*Köx/*Üörüü Misha-ny yrya-ny ihiir-der-de.
Lena/*Enthusiasm/*Joy Misha-acc song-acc whistle-caus-past.3

Facts about passivization also support the lexically transitive status of second-type unergatives: they can undergo saturation both in the lexicon and in the syntax. As argued in 6.6, whether saturation is lexical or syntactic is revealed by the case marking on the remaining argument: nominative in the case of lexical and accusative in the case of syntactic passivization.

(57) a. Ikki kilometr/kilometr-y süür-ülün-ne/xaam-ylyn-na.
Two kilometer/kilometer-acc run-pass-past.3/walk-pass-past.3
b. Masha/Masha-ny kül-ülün-ne.
Masha/Masha-acc laugh-pass-past.3
c. Yrya/Yrya-ny ihiir-ilin-ne.
Song/Song-acc whistle-pass-past.3

What, then, explains the ability of second-type unergatives to appear as intransitives in the syntax? Going back to Hale & Keyser's (2000) analysis outlined in 1.4.1 and 7.1 above, we would like to argue that unergative verbs of the second type (i.e. containing no lexical noun when decomposed) can appear in structures like (4a) with the null N licensed through classification by V as argued by H&K. Another way to express this is by saying that the bare noun is licensed by the semantics of the unergative verb which allows the establishment of a classificatory relationship between the verb inserted under V in (4a) and the covert N.

There is one interesting datum which may be brought to bear upon the inherent presence of the classifying component in unergative verbs. Sakha has the diminutive suffix /–ka/ which derives diminutive (or endearing) nouns from nominal bases; see e.g. appendix 3, section 1. For instance, *aqaka* can be said about a father who is physically smaller than his children/other fathers or it can be used as a term of affection, endearment.

(58)

Oqo 'child'	*oqoko* 'little child; darling child'
Aqa 'father'	*aqaka* 'little father; daddy'
Ebe 'grandmother'	*ebeke* 'little grandmother; granny'
Kün 'sun'	*künüke* 'dear sun'
Küöl 'lake'	*Küölüke* 'little lake; dear lake'
Kihi 'person, human'	*kihike* 'little person; darling person'
Kinige 'book'	*kinigeke* 'little book; darling book'
Alaadjy 'pancake'	*alaadjyka* 'little pancake'

Curiously, the same suffix can attach to verbs but only to unergatives of the second, non-denominal type. As (59) shows, it is as if diminutive attachment has the effect of turning an unergative verb into a noun so that *süür-eke* 'run-diminutive' can only function as a predicate if it is again verbalized with –LAA. The translations indicate that the diminutive suffix modifies either the surface over which running took place or the event of running itself such that running was done in several short bouts.

(59) Misha süür-eke-lee-te.
Misha run-dimin-verb-past.3
a) 'Misha ran over a small surface.'
b) 'Misha ran around in short bouts.'

In (60) the diminutive verb occurs with a regular non-diminutive noun. Again, as in (59) the verbal diminutive can qualify the running event itself as a series of quick happenings or it can qualify the accusative direct object as having a small size.

(60) Misha xonuu-nu süür-eke-lee-te.
Misha field-acc run-dimin-verb-past.3
a) 'Misha ran over a small field.'
b) 'Misha ran around a field in short bouts.'

The accusative direct object can itself be suffixed with the diminutive suffix. In this case the verbal diminutive can no longer modify the object: the only option left for it is event modification.

(61) Misha xonuu-ka-ny süür-eke-lee-te.
Misha field-dimin-acc run-dimin-verb-past.3
'Misha ran around a small field in short bouts.'

It is the example in (60) which is most telling and, in particular, the translation in (60a) which makes it evident that the unergative verb contains an element which classifies its object in terms of size. This makes (60) similar to the cases considered in 3.1.2.3.4 (footnote 42), namely, predicate classifier languages which have classificatory verbs containing a classificatory morpheme. For convenience the examples are repeated below.

(62) Navajo (Allan 1977:287)

a. béésò sì-?á
money perfect-lie(round entity)
'A coin is lying (there).'
b. béésò sì-nìl
money perfect-lie(collection)
'Some money (small change) is lying (there)'
c. béésò sì-ltsòòz
money perfect-lie(flat flexible entity)
'A note (bill) is lying (there)'

(63) Caddo (Mithun 1986:386)

a. Kapí: kan-čâ:ni'ah
cofee liquid-buy.past
'He bought (liquid) coffee.'
b. Kapí: dan-čâ:ni'ah
cofee powder-buy.past
'He bought (ground) coffee.'

(64) Gunwinggu (Gerdts 1998:90)

bene dulg-naŋ mangaralalymayn
they.two tree-saw cashew.nut
'They saw a cashew tree'

This preliminary investigation shows that at least two of the analyses advanced in Hale and Keyser (1993, 1998, 2000) may be on the right track, viz. syntactic derivation and null noun licensing through classification. What brings these accounts together is the postulation of a nominal component inside unergatives –

either overt, in the form of a lexical nominal base or hidden, in the form of a classifying component.