

Constructions with verbal nouns in Iraqw

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Iraqw has a number of morphological means to derive nouns from verbs. All of these can develop specific meanings but it is the nominalisation that expresses the action of the verb that allows for the expression of arguments, irrespective of the actual nominalisation morpheme. These arguments (patient or agent) can be expressed as possessive elements in noun phrases. Despite the fact that the deverbal noun is fully nominal in morphological characteristics, the deverbal noun can occur in constructions in which its semantic argument (patient or agent) is expressed as an object to the main verb. There are four constructions to integrate a deverbal noun in a clause. We provide an overview of the formal characteristics of these constructions.

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1. Formation of the verbal noun and its nominal nature

Iraqw is a Southern Cushitic language spoken in northern Tanzania by more than half a million of speakers (LOT 2009: 2). This article discusses constructions that involve a verbal noun. In this section we discuss the morphological properties of verbal nouns. Section 2 provides an overview of the various constructions that are used with verbal nouns and their functional differences. Section 3 discusses the realisation of arguments of the verbal noun. Section 4 concludes. The purpose of the article is to provide an inventory of Iraqw constructions involving verbal nouns and to open the path for deeper syntactic study.

There are several ways to form a noun from a verb in Iraqw (Mous 1993: 74–82; 167–170). Such a deverbal noun has all nominal morphological properties. Some of these nominalisations have specialised meanings. Those that have not and that denote the action of the verb, can all express their arguments in a construction with a main verb. The most productive derivation resulting in a noun denoting the action of the verb is the suffix *-a* (f) which results in a feminine noun (1a). Most verbs allow this derivation. Mous (1993: 167–170) considers this suffix to be different from the other nominalisations and labels it infinitive

because it is the most general nominalising suffix. However, this label is misleading because it is not the only nominalisation that allows for the expression of arguments and it is not fundamentally different from the other nominalizations in this respect. Moreover, there are some definable subsets of verbs that do not form a noun in *-a*. These are verbs that look as if they contain a verbal derivational suffix in *t* or *m*: Disyllabic verbs that end in *aat* or *iit* form a masculine verbal noun by shortening of this vowel (1b). The nominalisation *slakat* (m) is more general in meaning than its competitor *slakata* (f) (Mous 1993:75). And verbs ending in *iim* or *uum* form a masculine verbal noun by changing the final *m* to *ngw* (1c). If the most general derivation in *-a* for a specific verb has lexicalised to a specialised meaning, other formations, for example in *-o* (f) function for the most general meaning of the action of the verb, (1d). In sum, there are various nominalisations, all of which can lexicalise to specific meanings. The nominalisation that refers to the general action of the verb can have complements expressed, and verbal lexemes differ in which morphological formation is used for that general function.

Examples of nominalisations¹

- | | |
|---|--|
| (1) a. <i>ateet</i> (v) ‘call’ | <i>ateeta</i> (f) ‘calling’ |
| b. <i>slakaat</i> (v) ‘hunt’ | <i>slakat</i> (m) ‘hunting’ |
| <i>slakata</i> (f) ‘hunting’ | |
| <i>lehhit</i> (m) ‘marriage negotiations’ | <i>lehhiit</i> (v) ‘act as a middleman in marriage negotiations’ |
| c. <i>saaliim</i> (v) ‘pray’ | <i>saalingw</i> (m) ‘prayer’ |
| <i>soopiim</i> (v) ‘limp’ | <i>soopiingw</i> (m) ‘limp, stumble’ |
| <i>iimu/uum</i> (v) ‘begin’ | <i>iimu/uungw</i> (m) ‘beginning’ |
| d. <i>tsa/am</i> (v) ‘climb’ | <i>tsa/ama</i> (f) ‘ladder’ PL: <i>tsa/amadu</i> (p) |
| | <i>tsa/amtoo</i> (f) ‘climbing’ |

Deverbal nouns are indeed nouns as they can receive nominal morphology. Deverbal nouns with possessive suffixes occur, (2), and deverbal nouns can be in construct case and often are, specifically when they occur before an inflected verb such as the verb ‘go’, acting as an auxiliary for future tense in (3). Nouns receive

1. The Iraqw orthography is used in this paper: / is a voiced pharyngeal fricative with creaky voice, hh is a voiceless pharyngeal fricative, ʔ is a glottal stop (not written but present word initially and between different vowels, thus ai is in fact aʔi), sl is a voiceless lateral fricative, tl and ts are ejective affricates, the former with lateral release, ng is a velar nasal word-initially and word-finally and followed by a voiced velar stop between vowels. Double vowels are long; (high) tone is only being marked on the second vowel symbol. Low tone is left unmarked. A list of abbreviations used in the examples are shown at the end of the chapter.

construct case when modified but also when in the backgrounded position before the inflected verb and following the separate inflectional complex.

- (2) *kár inín ta-n slakat-uu-ín áy*
 well 3PL IMPS-EXPEC hunting-M-3PL.POSS go:3M
 ‘Well, they are going on their hunt.’
- (3) *loitléér aluu-wo taa slakat-uú áy maatlee-r-o*
 next.day afterwards:P-PRED IMPS:PRF hunting-M:CON go:3M morning-F-PRED
 ‘The next day they go hunting in the morning.’

The verbal nouns do not allow all possible nominal morphology. Verbal nouns with demonstratives or with indefinite suffixes are rare but possible, *de’eengw-dá* ‘that herding’, *deengw-ko* ‘a certain herding’, *hheeku-dá* ‘that fetching water’, *hheekoku* ‘a certain water fetching’, *xuuma-dá* ‘that guarding’, *xuumar-ka* ‘a certain guarding’, etc. Given the fact that a verbal noun usually denotes an abstract concept, being the action of the verb, there generally are no number derived forms of verbal nouns: no plurals, no derived singulars. These are possible though as soon as the verbal noun has lexicalised to a specialised and countable meaning. For example, the lexicalised *tsa/am-a* ‘ladder’ from *tsa/am* ‘to climb’ can have a derived plural, *tsa/ama-du* (4b). The deverbal noun for ‘song’ derived from *daa* ‘to sing’ can be used with demonstratives, as in (4a).

- (4) a. *daa*’ (v) ‘sing’ *daa’angw* (m) ‘song’
daa’aang-ós kwisíng /song:M-3SG.POSS INDEP.M-DEM2/ ‘this song of his’
daa’angw-qá’ /song:M-DEM3/ ‘that song’
 b. *tsa/am* (v) ‘climb’ *tsa/ama* (f) ‘ladder’, PL: *tsa/amadu* (p)

Deverbal nouns possess the syntactic nominal properties that they can act as subject in a clause, like *faaro* (f) ‘counting, number’ in the nominal clause (5), and in a verbal clause in (6). The verbal noun */ayma* ‘eating’ is object in (7), and the verbal noun *huriingw* in (8b) is in a nominal construction with the adjective *wasl* ‘without’, compare this to the same construction with a underived noun in (8a). In (9), the verbal noun *slipisi* ‘twirling’ is used as a nominal modifier of a noun requiring construct case on the head noun.

- (5) *faaro ar kángw Iraqw a dimbé’ nee faaro ar*
 counting INSTR matter:M:CON Iraqw COP different with counting INSTR
Kiswahili
 Swahili
 ‘Counting in Iraqw is different from counting in Swahili.’

- (6) *asma daxa sla'aari aa qaró gwá'*
 because now wanting.F 3:PRF already die:3F
 'Because the love has already died.'
- (7) *umuú hee-w-o /ayma g-a slaá' umuú deelo-r-o*
 every:CON person-M-PRED eating.F O3-O.F want:3M every:CON day-F-PRED
 'Everyone wants to eat every day.'
- (8) a. *k-a sumu wasl*
 O3-O.F poison without
 'It is without poison.'
- b. *fa/a k-a huriingw wasl*
 porridge O3-O.F cooking without
 'The porridge is not cooked.'
- (9) *naanú slipisi kw-a qaás*
 vegetables:M:CON twirling O3:IMPS:O.M-PRF put:3M
 'The twirled vegetables were cooked.'

In addition, verbal nouns lose the verbal property of the ability to express tense. Tense is expressed by tone on the verb but not on the verbal noun. Malchukov (2004: 58) shows that Iraqw follows his Generalised Scale Model of hierarchies of deverbilization and nominalization in which Iraqw verbal nouns "acquire all nominal categories (including the class/number marker), while losing all verbal categories (except for the derivational valency markers)."

- (10) Iraqw generalized scale representation (Malchukov 2004: 58)
 Noun-CL-Number-Possessive-Determiner-Case//Verb-(Valency)-Aspect-
 Tense-Mood-AGR-IF (AGR = agreement; CL = class; IF = illocutionary force)

Iraqw verbal nouns actually do have the possibility of retaining aspectual marking but this is still in line with Malchukov's observations, as Aspect is not (or barely) expressed inflectionally on the verb but primarily derivationally. Verbal nouns can be formed from verbs with aspect derivation, as in (11).

- (11) *kuutl* (v) 'make a sign, wink, signal secretly'
kutla (fi) 'winking, a wink'
kutliim (v:IMPFV) → *kutliingw* (m) 'be winking'
kiis (v) 'open'
kisa (f) 'opening'
kisiim (v:IMPFV) → *kisiingw* (m) 'opening for a while, as a process'

Verbal nouns that retain the general verbal lexical semantics, expressing the action of the verb, allow for the expression of a patient or agent of the verbal noun. In Example (12) the lice are semantically the patient of eating but are also syntactically

object of the clause as is evidenced by the F gender object pronoun incorporated in *biringa*. This is discussed in more detail in Section 3.

- (12) Example of verbal noun with a complement

kár itnaa-r-ós /aymaa-r-o biring-a hhe'és
 well lice-F-3SG.POSS eating-F-PRED COND:3:O3-O.F finish:3F
 'When she had finished eating her lice.'

A deverbal noun like *daa'angw* (m) or *daa'a* (m) 'song, singing' is used as a concrete noun in (4a), and, in that case, does not allow the expression of a patient of the verbal noun. If the act of singing needs to be expressed as a complement of an inflected verb, an extra verb, often *oo* 'to say, utter', is used with *daa'a* 'song' as its object. In (13a), *daa'angw* is constructed as a concrete object of 'to finish', while in (13b) *daa'angw* is the patient of 'saying' and is the object in the clause with the masculine object pronoun *ngu* referring to it. The expression of 'singing' can no longer be referred to by the deverbal noun *daa'angw* 'song' but requires *daa'angw ooa* 'saying a song'.

- (13) a. *i daa'. kár daa'angw ngu-wa hhe'eés, i-wa oó'*
 3 sing:3M:PRES well song.M O3:O.M-BGND finish:3M, 3-BGND say:3M
 'He sings. Well, when he finished singing, he said.'
- b. *kár daa'angw ooa-r-o ngu-wa hhe'ees-ír.*
 well song.M saying-F-PRED O3:O.M-BGND finish-3P
 'Well, when they had finished saying the song.'

On the other hand, verbal nouns without a lexicalised concrete meaning but rather with the general semantics of the action of the verb have the verbal quality of allowing for the expression of patients or agents, and this is irrespective of the actual nominalisation suffix that they contain. The most regular, most productive general nominalising suffix is *a* which results in feminine nouns. But verbal nouns in other suffixes have the same verbal qualities as long as they are general in meaning. For example, the nominalization by vowel shortening rendering a masculine verbal noun, *slakat* (m) 'hunting' from *slakaat* (v) 'to herd' with the patient 'food' in (14); the nominalization in *o*: *lohisoo* (f) 'carrying from *lohiis* 'to carry' with the patient 'knee' in (15); and the nominalization in *ngw*, *de'engw* 'herding' from *de'eem* 'to herd' and its patient 'cattle' in (16).

- (14) *muruu /aymaarós g-u-n slakat-uú áy*
 things:M:CON eating-F-3SG.POSS O3-O.M-EXPEC hunting-M:CON go:3
 'He goes hunting his food.'
- (15) *guruungura lohisoo-r-o g-u bal-ii-ká*
 knee moving-F-PRED O3-O.M achieve-3:PRED-NEG
 'He could not move his knee.'

- (16) *i-n hikwaá deéngw áy*
 3-EXPEC cattle:P:CON herding:M:CON go:3
 ‘He goes herding.’

Thus, it is not the morphological nominalization marker that determines whether a verbal noun retains its verbal ability to have an argument but it is the general semantics of an action verbal noun that allow for this; the semantics rules the syntax.

2. Verbal nouns in constructions

2.1 Introduction

The verbal noun can enter as (part of) noun phrases in all syntactic positions. They rarely occur as subjects, but can, (16, 17). In (17) the verbal noun *tlaqo* is feminine and the subject of the clause as can be concluded from the feminine gender subject marking on the inflected verb *koón* ‘(she) has’. The verbal noun *tlaqo* is modified by its patient the noun *tla/e* ‘stones’. Nouns that are modified by other nouns (or by any other modifier) are in construct case which consists of a high tone and gender marking (m, f or p).

The object of the inflected verb, *tsaxwa* (p) ‘danger’, receives construct case as all bare objects do that follow the inflectional complex, here *i* third person subject marker, and precede the inflected verb.² In (18), *doosl-a* (f) ‘farming’ from the verb *doosl* ‘to farm’ is the subject of a nominal clause; *dooslitee* ‘farmers’ is the plural of the agent noun derived from the same verb.

- (17) *tlaqór tla/e i tsaxwá koón*
 throwing:F:CON stones 3 danger:P:CON have:3F
 ‘Throwing stones is dangerous.’
- (18) *doosla a gár kilá’ dír dooslitee-r-o*
 farming COP thing:F:CON just place:F:CON farmers-F-PRED
 ‘Farming is the only thing for farmers.’

2. We cannot provide an explanation why the object in pre-verb position requires the construct case. This is valid for bare objects, also when other material separates them from the pre-verb. Modified objects are for that reason in construct case and do not require extra construct case marking. Harvey (2018: 392–394) approaches this conundrum from a different, more syntactic angle for the closely related language Gorwaa and takes the noun with the gender linker as elsewhere condition for usage and suggests that the linker is unpronounced when bare nouns are preposed as subject or objects, and when incorporated.

2.2 Overview of verbal noun constructions

Verbal nouns as complements occur mainly in four different constructions with a main verb. When they occur as object, two constructions are available: A: before the main verb in construct case just like any other nominal object preceding the verb (19). B: The verbal noun can occur as pre-posed object before the inflectional complex which then contains an object pronoun referring to it (20). C: A verbal noun can occur pre-verbally in a construction as case marked object, most commonly the ablative case clitic =*wa*, (21a); in a variant of this construction the phrase with the ablative clitic is moved to clause final position in which case it requires an additional element *alé*, (21b). Finally, D: verbal nouns can occur, and very often do, with the predicative suffix -*o*, (22) linked to the main verb but not as a complement. In sum, we distinguish the following four constructions with verbal nouns:

Table 1. *Possible constructions involving verbal nouns*

- A. verbal noun is pre-verbal object with construct case (19)
- B. verbal noun is pre-posed object with an object pronoun referring to it (20)
- C. verbal noun is pre-verbal and has an ablative case clitic =*wa* (21)
- D. verbal noun is linked to the main verb by the predicative suffix *o* (22)

- (19) A verbal noun is pre-verbal with construct case

kár loitleér i slakat-uú daahh
 well next.day 3 hunting-M:CON come.from:3M
 ‘The next day he returned from hunting.’

- (20) B verbal noun is a pre-posed object with an object pronoun referring to it

fuutlo a aleeslaw-a-ká
 whistling O.F can:1SG-PRED-NEG
 ‘I cannot whistle.’

- (21) a. C verbal noun is pre-verbal and has an ablative case clitic

ni-wa baá hikwa lootór=wá ti'ít daxa
 HITH-BGND in:CON cattle milking:F:CON=ABL come.out:3F now
 ‘When she had come out of milking cows,’

- b. C verbal noun has an ablative case clitic =*wa* and is moved clause finally

ni-wa ti'ít daxa baá hikwa lootór=wá alé
 HITH-BGND come.out:3 now in:CON cattle milking:F:CON=ABL RES
 ‘When she had come out of milking cows,’

- (22) D verbal noun with the predicative suffix *o* delimits the main verb
kár itnaa-r-ós /aymaa-r-o birng-a hhe'és
 well lice-F-3SG.POSS eating-F-PRED COND:3:O3-O.F finish:3F
 'When she had finished eating her lice'

2.3 Functional differentiation of the constructions

The four different constructions in which verbal nouns combine with verbs have slightly different functions, but these differences are subtle. They can be discerned by preferences and restrictions between certain main verbs and their occurrence in the various constructions. In many instances the constructions are exchangeable and the choice depends more on pragmatic considerations of information structure than on functional restrictions of the constructions themselves.

Thus, three of these four constructions occur with the same verbal noun *hamtlo* (f) 'bathing, bath' in the same stretch of a story. First in (23a) as a complement of 'to go' with construct case (type A); then fronted in (23b) as object of 'to finish' referred to with the feminine object pronoun *a* (type B), and with the predicative suffix before the inflectional complex, (23c) (type D). There are no examples in the corpus of this specific verbal noun *hamtlo* 'bathing' with the ablative clitic =*wa* (type C), but this can be constructed (23d).

- (23) a. *masoombár iimi i hamtlór eér* A
 boys:F:CON people 3 bathing:F:CON go:3F
 'The common boys went bathing.'
- b. *daáqay hamtlo k-a-wa adoo-qá'=wá hhe'es-aán* B
 VOC:boys.M bathing.F O3-O.F-BGND manner:F-DEM3=ABL finish-1PL
 'Boys, when we finished bathing like this,'
- c. *hamtlo-r-o ta-wa hhe'és* D
 bathing-F-PRED IMPS-BGND finish:3M
 'When they finished bathing,'
- d. *aa hamtlór=wa hhe'és* C
 3:PRF washing:F:CON=ABL finish:3M
 'They (the boys) finished washing.'

The choice of construction correlates strongly with the lexical verb that is the conjugated main verb. The verb *ay* 'to go' prefers construction A, (23a), and forms a close bond with an immediate preceding verbal noun in construct case. On the other hand, phasal verbs such as */aansuus* 'to begin', (24), *kuumiit* 'to continue', (25), *hhe'ees* 'to complete', *may* 'to leave', *tseegemiis* 'to be slow', *faak* 'to finish' prefer the construction with a verbal noun with the predicative suffix (D).

- (24) *tluway i /aansuús tluwtan-t-o*
 rain.M 3 begin:M raining-F1-PRED
 ‘The rain starts (to rain).’
- (25) *geetima-r-o i-na kuumiít bará loohi-r-i alé*
 blocking-F-PRED 3-PAST continue:3M in:P:CON road-F-DIR RESPRO
 ‘He continued to obstruct the road.’

It is rare for these phasal verbs to take their verbal noun as internal object with construct case (construction A). Modifying a sentence like (26a) into such a construction leads to ungrammaticality (26b). Constructions B and C are possible with *hhe'eés* ‘to finish’ as we saw above (23b, d). As is incorporation in a special productive construction (26d) to mean ‘to do something completely’, see (26e). In fact, the incorporation construction is a fifth type, specifically used with the main verb *hhe'eés* ‘to finish’; we do not discuss this construction which is otherwise rarely used with verbal nouns, but see Kooij and Mous (2002) and Olthof et al. (2020), and Section 2.4.

Phasal verb prefers verbal noun with predicative suffix

D

- (26) a. *hamtla-r-o bir-na hhe'eés*
 bathing-F-PRED COND:3-PAST finish:3M
 ‘When he finished washing, ...’
- b. **aa hamtló-r hhe'eés*
 3:PRF bathing:CON-F finish:3M:PAST
- c. *hamtlo g-a hhe'eés*
 washing O3-O.F finish:3M
 ‘He finished washing.’
- d. *aa hhaamtlo=hhe'eés*
 3:PRF washing=finish:3M
 ‘He bathed a lot, well.’

A

These correlations between the choice of the lexical inflected verb and type of verbal noun construction are only strong tendencies and have their exceptions. In the corpus of narratives, *slaa* ‘to want’ always takes the C construction with an ablative suffix if the verbal noun is transitive and has a patient, as is the case in (27). But the equivalent sentence (28) in which the verb *slaa* occurs with the verbal noun as internal object with construct case (A) shows that both constructions are possible for situations in which the verbal noun has a patient.

- (27) */ayto'o a dooslár=wá slaá'*
 maize.F O.F cultivating:F:CON=ABL want:1SG
 ‘I want to cultivate maize.’

C

- (28) /*ayto'o a dooslár slaá'* A
 maize.F O.F cultivating:F:CON want:1SG
 'I want to cultivate maize.'

These tendencies of correlation between certain constructions with certain lexical main verbs are due to the subtle semantic differences in the constructions. There is a difference in meaning between the construction with the predicative suffix (construction D) in (29), and the constructions as object (construction A), (27) or with an ablative suffix (construction C), (28). The construction D with the predicative suffix separates the lexical meaning of the main verb and the verbal noun as independent but linked entities.

- (29) /*ayto'o doosla-r-o a slaá'* D
 maize.F cultivating-F-PRED O.F want:1SG
 'I like cultivating maize.' (What I like is cultivating maize).

This semantic independence in construction D is, however, also possible in the interpretation of construction C with an ablative suffix, as is illustrated by the semantic equivalence of (30a) with construction D and (30b) with construction C. In both examples, the boys are object in the sentence and referred to with an M object pronoun, and agent of the verbal noun.

Semantic equivalence of constructions C and D.

- (30) a. *daaqay g-u slaá' doosla-r-o* D
 boys.M O3-O.M want:3M digging-F-PRED
 'He wants the boys to help to dig.'
- b. *daaqay g-u dooslá-r=wa slaá'* C
 boys.M O3-O.M digging:CON-F=ABL want:3M
 'He wants the boys to help to dig.'
- c. *daaqay g-u dooslá-r slaá'* A
 boys.M O3-O.M digging:CON-F want:3M
 'He wants the boys to help to dig.'

Constructions A and B contrast with constructions C and D in that the latter two constructions allow for interpretations where the main verb and the verbal noun are seen as separable parts of the event. This separation of inflected main verb and verbal noun is imposed by construction D with the predicative suffix. Construction C with the ablative clitic can have both interpretations: separate parts as in (30b) and linked action as in (27). The choice between construction A with the verbal noun between the inflectional element and the verb and construction B with the verbal noun before the inflectional element is a matter of information structure. In general, phrases between the inflectional element and the main verb are backgrounded and those preceding the inflectional element are thematic

(Mous 1993:254). More detail for each of the four constructions is presented in the following sections.

2.4 Verbal noun as object following the inflectional complex and preceding the verb (construction A)

In the construction in which the verbal noun precedes the main verb, this noun is in construct case, just as any complement of the verb in this position. Nevertheless, the verbal noun and the verb do not form one close-knit phrase as the head noun in construct case does in noun phrases. A verbal adverb, such as *malé* ‘again’, occurs after the inflectional complex and most often before the verbal noun, (31a). However, such adverbs can occur between the object noun in construct case and the inflected verb, (31d). This is also possible with verbal nouns in construct case (31b); even though in all instances in the narratives such verbal adverbs were actually placed before the verbal noun. The verbal adverb can also occur clause finally with a resumptive *alé*, (31c).

- (31) a. *atén a malé gu'utér sla'-aán*
 1PL 1/2 again sleeping:F:CON want-1PL
 ‘We want to go to bed again.’
 b. *atén a gu'utér malé sla'aán*
 c. *atén a gu'utér sla'aán malé alé*
 d. *i basi-r-ar Arushá-r malé káy*
 3 bus-F-INSTR Arusha:CON-F again go:3M
 ‘He goes again by bus to Arusha.’

This construction A is frequent with the verb *aw* ‘to go’ to express future, (32, 33). The construction with ‘to go’ is on its way to become an auxiliary of future marking.

- (32) *balo-kaa-r-o aníng kú-qo qaytsúu áw.*
 day-INDF.F-F-PRED 1SG 2SG.M:O2SG.M-EMPH watching:M:CON go:1SG
 ‘One day I shall come to see if everything is alright with you.’
 (Berger & Kießling 1998)

- (33) *qoomár daxa tsee/amá aa adoo-r-í=wá gwa'arár áy,*
 time:CON-F now sunshine 3:PRF way-F-DEM1=ABL dying:F:CON go:3M
 ‘At this time the day was about to be finished.’

An even stronger bond between the verbal noun and the main verb occurs when the verbal noun is incorporated into the inflected verb. This construction is grammaticalised with the verbal noun incorporated into *hhe'ees* ‘finish’ in order to express that something is done ‘completely’, (34). “Incorporated” means that the

verbal noun has no construct case and no material can intervene between the incorporated verbal noun and the verb *hhe'ees*; for Iraqw noun incorporation, see Kooij and Mous (2002) and Olthof et al. (2020). Example (35) illustrates regular noun incorporation.

- (34) *yaaee-dá' g-a-na xuuxua=hhe'ees.*
 leg:F-DEM4 O3-O.F-PAST watching=finish:3M
 'They watched that leg intensely.'
- (35) *diraangw hee g-u-na saga=áy.*
 lion person.M O3-O.M-PAST head=go:3M
 'The lion went ahead of the man.'

2.5 Verbal noun as external object (construction B)

The verbal noun as an external object before the inflectional complex (construction B) occurs rarely (but it does, see 58), and mainly for verbal nouns with a concrete interpretation such as */ayma* 'eating, food', (36), *daa'angw* 'singing, song', (37).

- (36) *bar /aymaa-r-ós ngaa hhe'és,*
 COND eating-F-3SG.POSS O3.S3:O.F:PRF finish:3F
 'When she finished her meal.'
- (37) *kár daa'angw ng-u-wa hhe'és*
 well song.M O3.S3-O.M-BGND finish:3M
 'When he finished the song.'

2.6 Verbal noun and ablative case clitic (construction C)

A different construction consists of a main verb and the ablative case clitic =*wa* on a verbal noun, construction C in (38) and (39). The semantic complement of the verbal noun is either linked with construct case *hikwaá* 'cattle' to the verbal noun *fiisa* (f) 'stealing' (38) or placed before the core of the clause: *do'dá* 'that house' with an object pronoun *u* referring to it, (39). This is discussed in Section 3 below.

- (38) *daaqay i hikwaá fiisár=wá slaa'*
 boys.M 3 cattle:P:CON stealing:F:CON=ABL want:3M:PAST
adoo-r-i-he
 manner-F-DEM1-PRED
 'The boys wanted to steal the cattle like that.'

- (39) *ís do'dá' g-u hayohár=wa slaa'*
 3SG house:M:DEM4 O3-O.M taking:F:CON=ABL want:3M
 'He wants to take that house.'

We have only few examples of case clitics other than =*wa* used on verbal nouns in the corpus. The nominalised verb occurs with an instrumental case marking in (40) as a variant of the same sentence with the ablative =*wa* in (30b), and with a slightly different connotation, presenting the boys as an instrument. The reason case marker *sa* in (41a) is an alternative to the ablative with no clear difference in meaning, (41b). There is likely to be a slight difference in meaning between (41a) and (41b) though: In (41a) the focus of attention is on the purpose of sending the boys, while in (41b) it is on sending away from the speaker. In most cases the two case clitics are not at interchangeable.

- (40) *daaqay g-u doosla-r=ar slaa'*
 boys O3-O.M digging-F=INSTR want:3M
 'He intends to make the boys do the digging.'
- (41) a. *garma gu-na barwadú leehhá-r=sa ya/aáw*
 boy O3:O.M-PAST letters:CON catching:CON-F=REAS send:3M
 'He sent a boy to get the letters.'
- b. *garma gu-na barwadú leehhá-r=wa ya/aáw*
 boy O3:O.M-PAST letters:CON catching:CON-F=ABL send:3M
 'He sent a boy to get the letters.'

In all instances in the corpus, the verbal noun with =*wa* immediately precedes the conjugated verb even though placement after the verb is not excluded, (42). Whenever a pre-verbal element such as a phrase with a case clitic or a verbal adverb occurs after the verb, it needs to be followed by *alé* a dummy for the verb, here glossed with RES for resumptive.

- (42) *nee Tarmoo-w-í ta-y slayé' baraá de'éngw=wa*
 with Datooga-M-DEM1 IMPS-CSEC get:3PL:PRF in:P:CONherding:CON:M=ABL
alé.
 RES
 'And they met with a Datooga man during herding.'

The construction with =*wa* almost exclusively combines with the verb *slaa'* 'to want, like' in the corpus. Occasionally a different conjugated verb combines with the verbal noun marked with the ablative suffix: the verb *ya/aáw* 'send' in (41b) above, and *qaas* 'to put' in (43). Verbs of placing and of movement generally combine more easily with the ablative suffix, such as *ti'it* 'come out' in (21a) above.

- (43) *dírangw ala kú yangariít u-n tsuwa xuumuusamó=wá*
 VOC:lion.M but 2SG.M big O2SG.M-EXPEC sure watching:M:CON=ABL
qaas-ána máaay ta-ri malé /eeráy.
 put-1PL:PRED water IMPS-CSEC again dirty.water
 ‘Lion, you are big, for sure we place you to watch; the water is dirty again.’

In almost all instances of this construction type C with the ablative clitic, the verbal noun has an expressed agent (41b, 43) or patient (38, 39). This is not the case in (42) in which the phrase with /herding=ABL/ ‘while herding’ is circumstantial. In this instance the use of ablative can be explained by the expression for durative aspect. The ablative is often used on locatives to express duration as analysed in Kruijt (2018).

The most common construction with a verbal noun has the verbal noun before the inflectional complex or after the inflected verb with the suffix *o*.

2.7 Verbal noun with predicative suffix -o

The construction of the verbal noun with the predicative suffix *-o* presents the action expressed in the verbal nouns and its complements as the scope of the main verb. This is what we attempt to express in the translation “as regarding X-ing”, (44). The functions of this suffix are discussed in detail in Mous and Qorro (2010:77–78). It is used after clauses or noun phrases to indicate the unit over which an operation such as questioning or negation is valid, but it can also mark a clause to be the setting to the linked next one or render phrases adverbial. The addition of the suffix on verbal nouns is close to the latter. The term predicative suffix is chosen because it establishes a minor predication within a sentence as an adjunct. Subjects and objects do not receive this suffix. Kerr (2020) characterizes the same suffix in closely related Gorwaa as “to license nominals that are outside of the vP and/or cannot be licensed by the inflectional complex and the verb.”

- (44) *ta-wa hhe'ée /ayma-r-o*
 IMPS-BGND finish:3M eating-F-PRED
 ‘when they were finished as regarding eating.’

The suffix cannot occur between the inflectional complex and the inflected verb but only on phrases before or after this core of the clause. The verbal noun plus *o* can appear in any position outside this: after it (45a), before it (45b), or after the subject *naana* ‘brother’ (45c), with the subject after the verb (45d) in both orders (45e) but the subject clause finally following the verbal noun is a typical afterthought with a preceding pause.

- (45) a. *naana aa hhe'eés /aymaa-r-o.*
 brother 3:PRF finish:3M eating-F-PRED
 'Brother finished eating.'
 b. */aymaa-r-o naana aa hhe'eés*
 c. *naana /aymaaro aa hhe'eés*
 d. *aa hhe'eés naana /aymaaro*
 e. *aa hhe'eés /aymaaro, naana*

The predicative suffix on the verbal noun excludes the simultaneous use of a possessive or any other nominal suffix, also excluding the construct case.

3. Complements of the verbal noun

3.1 Overview

Malchukov (2004:60), referring to Comrie and Thompson (1985) and Koptjevskaja-Tamm (1993), notes that arguments in nominalizations are either encoded as verbal arguments that retain their sentential marking or as noun phrases dependent in the possessive form. Iraqw showing nearly full deverbalization and full nominalization in its deverbal nouns is expected to disallow sentential marking of arguments in nominalization and use possessive forms in a noun phrase construction. Interestingly, Iraqw allows both. It does show encoding of complements of the verbal noun in possessive constructions, but it also allows complements of verbal nouns to be realized as object noun phrases in the clause, referred to by the object pronoun of the inflected main verb. Restrictions on coding patients or agents of the verbal noun vary along the type of verbal noun construction (A, B, C, or D). First, we discuss the properties of the marking of complements by possessive constructions in the noun phrase. These possessive suffix indicate a patient role by default, but can refer to an agent under certain conditions.

3.2 Complements in possessive constructions and their semantic roles

The complement of a verbal noun can materialise as a possessor of the verbal noun in a regular N construct.case N construction. In (46) the verbal m noun *xeemu* 'coming' is in construct case and modified by the agent noun *Yesu*, and preceded by a locational noun *daanda* (m) 'back' in construct case as well, here expressing 'about' resulting in 'about the coming of Jesus'. This example uses the D-type construction with the predicative suffix *o*.

- (46) *inós i ya/a/án daandú xeemú Yesu-w-o* D
 3SG 3 believe:IMPFV:3M back:M:CON coming:M:CON Jesus-M-PRED
 'He believes in the coming of Jesus.'

A similar noun phrase with the verbal noun as head is used in Example (47, 48) in a type B construction with the NP clause initial and an object pronoun referring to the head noun of the NP, which is a verbal noun.

- (47) *tša/amtór gawá xa'ano g-a aleeslay-ká* B
 climbing:F:CON top:P:CON tree.M O3-O.F can:3M-NEG
 'He cannot climb up into the tree.'
- (48) *keemuú Arusha g-u slaa'* B
 going:M:CON Arusha.F O3-O.M want:3M:PRES

All type of constructions allow the expression of the complement of the verbal noun in a noun phrase possessive construction. In such a construction the complement is either an agent (46) or a patient (47, 48) of the verbal noun.

Agents (49, 50), or patients (51b, c, d, e), can be represented by a possessive suffix on the verbal noun. This is equally valid for all construction types. Type A (51g), B (49), C (51d, e, f), D (51a, i).

- (49) *tleemu-w-ós ngu-na aníng-i oó'* B
 leaving-M-3SG.POSS O3.S3:HITH:O.M-PAST 1SG-DIR say:3M
 'He informed me of his leaving.'
- (50) *tleemu-'eé' ngu-na oó'* B
 leaving:M-1SG.POSS O3.S3:HITH:O.M-PAST say:3M
 'He told me to go.'
- (51) a. *aníng a harahhiif ara'aangw-os-ee* D
 1SG 1/2 expect:IMPFV:1SG seeing-3SG.POSS-PRED
 'I expect to see him.' Poss = Pat
 *'I expect him to see.' *Poss = Ag
- b. *ara'aangwós u harahhiif* B
 seeing:M:3SG.POSS O.M expect:1SG
 'I expect him to see.' Poss = Ag
- c. *ara'aángw aako aníng u harahhiif* B
 seeing:M:CON grandfather 1SG O.M expect:1SG
 'I expect grandfather to see.'
- d. *aníng a aako ara'aang=wa harahhiif* C
 1sg 1/2 grandfather seeing=ABL expect:1SG
 'I expect grandfather to see.'

- e. *aako aníng u ara'aang=wa harahhiif* C
 grandfather 1SG O.M seeing=ABL expect:1SG
 'I expect grandfather to see.'
- f. *aníng a ara'aangw-ós wa harahhifiit* C
 1SG 1/2 seeing-3SG.POSS ABL expect:IMPFV:1SG
 'I expect to see him.' Poss = Pat
 *'I expect him to see.' *Poss = Ag
- g. *aníng a ara'aangw-ós harahhifiit* A
 1SG 1/2 seeing-3SG.POSS expect:IMPFV:1SG
 'I expect to see him.' Poss = Pat
 *'I expect him to see.' *Poss = Ag
- h. *ara'aangw-ós aníng u-n harahhifiit* B
 seeing:m-3SG.POSS 1SG O.M-EXPEC expect:IMPFV:1SG
 'I am expecting to see him.' Poss = Pat
- i. *inós u harahhifiit ara'aangw-een-ee* D
 3SG O.M expect:IMPFV:1SG seeing-1PL.POSS-PRED
 'I expect him to see us.' Poss=Pat
 *'I expect us to see him.' *Poss = Ag

The possessive suffix can be interpreted as Agent in construction B (6ob) if no patient is present in the clause. In construction B an interpretation of the possessive suffix as patient occurs when there is another noun phrase present in the clause that has to be interpreted as agent, *aníng* 'me' in (6oh). The default interpretation of the possessive suffix is to be a patient whenever this fits in the clause, in all construction types, and the agent interpretation of the possessive suffix is not available in those instances (51a, f, g, i). A possessed verbal noun like *huur-ingós* 'his/her cooking' is infelicitous because the possessor is immediately interpreted as patient.

The following Table 2 summarises what we know about marking of agents and patients of the verbal noun within its noun phrase in the various constructions. It shows that all constructions (A, B, C, D) allow both agents and patients to be realised as dependent elements in the noun phrases headed by the verbal noun, either as noun or as possessive suffix. In the A-type construction with the verbal noun in preverbal position, it is not felicitous to have a heavy noun phrase in which a noun phrase for agent or patient is also preverbal. Such a heavy noun phrase is possible in construction B, (52a) but leads to ungrammaticality when we attempt to position such a heavy noun phrase pre-verbally, (52b, c).

- (52) a. *Aayi tleemú ayshiga ngu-na aníng-i ó'*
 mother leaving:m:CON aunt O3:O.M-PAST me-DIR say:3F
 'Mother informed of aunt's departure.'

- b. *Aayi ayshiga ngi-na aníng-i tleemú ó'
 mother aunt.f O3:O.F-PAST me-DIR leaving:M:CON say:3F
- c. *Aayi aa aníng-i ayshiga tleemú ó'
 mother 3:PF me-DIR aunt.F leaving:M:CON say:3F

Construction D allows for the expression of the patient as object pronoun in the inflectional complex, (53a) and since the verbal noun is never pre-verbal in this construction, any object is always referred to by an object pronoun in the inflectional complex. It becomes unnatural to additionally express a patient (or agent) by a possessive suffix in construction D, (53b).

- (53) a. gaasa-r-o ku-wa hhe'eés
 killing-F-PRED O3:IMPS-O.M-BGND finish:3M
 'When they finished killing him,'
- b. #gaasa-r-os-e ku-wa/ka-wa hhe'eés
 killing-F-3SG.POSS-PRED O3:IMPS-O.M/O.F-BGND finish:3M

Table 2. Coding of agent and patients of verbal noun within NP in the 4 constructions

	A agent	A patient	B agent	B patient	C =wa agent	C =wa patient	D -o agent	D -o patient
VN:CON noun	–	–	51c	47	51d, e	41b	46	65b
possessive suffix	–	51g	49, 51b	51h	–	51f	–	–

3.3 Object properties of complements of the verbal noun

Despite the fact that the Iraqw verbal noun is at the nominal end of typological scales, there is an alternative way to express agents or patients of the verbal noun that is not nominal and that is not by integration into a noun phrase, but rather as object of the main clause and its inflected main verb.

We have already seen in (39) above for construction C with a case clitic that the patient of the verbal noun is constructed as an object *do'dá'* 'that house' of the clause with an object pronoun *u* referring to it. And in (30b) above the agent *daaqay* (m) 'boys' was realised as object with the object pronoun *u* referring to it. Such realizations of the agent or patient of the verbal noun as a clausal object occurs in all constructions. In (53a) we saw such a patient realised as object pronoun in a type D construction. In (54) the verbal noun *da/ata* (p) is preverbal in construct case (type A) while its patient complement *tsuurú* (m) 'a tree species' is an object of the clause placed before the inflectional complex and referred to by the masculine object pronoun *u*. In (55) the agent *daaqay* 'boys' is preposed and referred by the object pronoun *u* and it is the agent of the verbal noun *doosla*

which precedes the verb in construct case (construction A), to which the ablative clitic can be added with no change in meaning (construction C).

- (54) *kár loitleér tsuurú g-u-na da/atá áy.* A
 well next.day tsuru.tree O3-O.M-PAST burning:P:CON go:3M
 ‘The next day he went burning the *tsuru*-tree.’
- (55) *daaqay g-u dooslár (=wa) slaa’* A, C
 boys.M O3-O.M digging:F:CON(=ABL) want:3M
 ‘He wants the boys to help to dig.’

Construction D with a predicative suffix *-o* on the verbal noun is the most commonly used construction for verbal nouns, and also the one that prefers to have the complement as object of the clause. Recall that the NP possessive realization of the complement of the verbal noun is not excluded in this construction but feels unnatural, Example (53) above.

In construction type B, verbal nouns are the external object of the main verb, the object pronoun refers to the verbal noun, and a possessive suffix can express the complement of the verbal noun (49, 50). If both verbal noun and its complement are clause initial but not linked within one NP, then the object pronoun can refer to the complement, as we will see in (59) below.

All construction types with verbal nouns have two possible strategies for the complement of the verbal noun. Either it is realised as part of a noun phrase together with the verbal noun (or by a possessive suffixes to the verbal noun realizing human agents or patients); or it is construed as object of the clause with an object pronoun referring to it. The further possibilities and restrictions of expressing complements of verbal nouns are discussed below for each construction in turn.

3.4 Complements of verbal nouns as objects (constructions A and B)

If the verbal noun precedes the main verb immediately as an object (construction A), then the patient is preferably pre-posed preceding the inflectional complex which contains an object pronoun referring to the patient of the verbal noun. The possibility of an object pronoun referring to this patient phrase is taken as diagnostic that this phrase is object of the clause, as is the case with the masculine noun *tsuurú* ‘tree sp.’ becoming object of *da/atá áy* ‘go burning’ in (54).

If the complement immediately precedes the verbal noun which is placed pre-verbally, as *xwaanτέρ firo* ‘asking for porridge’ in (56) then the patient of the verbal noun is in construct case, as is the verbal noun. The inflectional complex does not contain an object pronoun and the object is completely pre-verbal. The patient in construct case followed by the verbal noun, *xwaanτέρ firo* ‘asking for

porridge', seems to form one genitive construction "porridge of asking". However, the patient *xwaante* can receive a possessive suffix. Noun phrases with a head noun that is modified by a suffix such as a possessive suffix require a construct case pronoun after the head noun in order to be further modified by a noun or pronoun. However, this construction in (56) does not allow such an addition of a construct case pronoun, (56b). Hence, a better alternative is to considering both nouns as separate noun phrases, each with the construct case, which is needed for any noun in the preverbal position. And the fact that the two nouns can be separated by a verbal adverb such as *malé* 'again' shows that these are indeed two separate phrases, (56a). Example (57) provides another argument for this alternative. In (57), the verbal noun *tlehhit* (m) 'making' is likewise preverbal and receives the construct case but its preceding patient is separated from it by the comitative verbal adverb *hara*, and hence they form two separate phrases.

This analysis of two separate independent NPs has its repercussions for what to consider arguments. The main verb *áy* 'he goes' in (56) and (57) would have two complements, namely the verbal noun and its patient, and the verb 'to go' would have two objects. This suggests that the verbal noun and the main verb form one semantic unit together and that it is this unit that takes (two) complements.

- (56) a. *i-ri xwaantér (malé) firór áy.* A
 3-CSEC porridge:F:CON (again) asking:F:CON go:3M
 'And then he asked for porridge.'
- b. *i-ri xwaante-r-ós *ar firór áy* A
 3-CSEC porridge-F-3SG.POSS *CON.F asking:F:CON go:3M
 'And then he asked for his porridge.'
- (57) *garma i-ri qatuú áy iinslaawaay* A
 boy 3-CSEC lying:M:CON go:3M:PAST neighbours
i-na maheeri-wós hara tlehhtuú áy A
 3-PAST arrows.P-3SG.POSS COM making:M:CON go:3M:PAST
 'The boy went to stay with the neighbours. He went to prepare his arrows there.'

The situation to have two separate noun phrases, the verbal noun and its complements also occurs when both are preposed. In (58a) both patient and verbal noun are preposed and have different genders: the masculine object pronoun refers to the masculine *hiima* 'rope', patient of the feminine verbal noun *uruxa* 'pulling' (58a), while the feminine verbal noun triggers the feminine pronoun if it precedes the patient, (58b). However, both sentences are just about acceptable, and construction D with a predicative suffix is strongly preferred. Or, also perfectly acceptable is to have the verbal noun as head noun modified by its complement in this preposed type B construction, (58c).

Verbal noun with its complement preceding

- (58) a. #*na/ii* [*hiima*] [*uruxa*] *ngu-na* *ii'ar-iyé'* B
 children rope.M pulling.F O3:DEP3:O.M-PAST try-3PL:PAST
 'The children have tried to play rope pulling.'
- b. #*na/ii* [*uruxa*] [*hiima*] *ngi-na* *ii'ar-iyé'* B
 children pulling.F rope.M O3:DEP3:O.F-PAST try-3PL:PAST
 'The children have tried to play rope pulling.'
- c. *na/ii* [*uruxár* *hiima*] *ngi-na* *iiariyé'* B
 children pulling:F:CON rope.M O3:DEP3:O.F-PAST try-3PL:PAST
 'The children have tried to play rope pulling.'

A lot of different orders of the verbal noun and its patient are actually possible. The verbal noun can be preverbal (59a, b), (type A) or preposed (59c, d), (type B). The patient of the verbal noun can be preverbal preceding the verbal noun (59a), or preposed (59b, c). When both verbal noun and its patient are preposed, the patient noun needs to precede the verbal noun (59c, d); and an agent needs to precede too, (59e). However, an agent is preferably not together with the verbal noun before the verb and after the inflectional complex, (59f); the latter sentence would be acceptable with an ablative case on the verbal noun, (59g).

Alternative positions of the verbal noun and its complement

- (59) a. *i Arusha keemú* *slaa'* A
 3 Arusha going:M:CON want:3M:PRES
 'He wants to go to Arusha.'
- b. *imboru g-u* *keemú* *slaa'* A
 Mbulu O3-O.M going:M:CON want:3M:PRES
- c. *Arusha keemu g-a* *slaa'* B
 Arusha going O3-O.M want:3M:PRES
- d. **keemu Arusha g-u* *slaa'* B
 going Arusha O3-O.M want:3M:PRES
- e. *ayshiga xeemu g-u* *slaa'* B
 aunt coming.M O3-O.M want:3M
 'He wants aunt to come.'
- f. **i ayshiga xeemú* *slaa'* A
 3 aunt coming:M:CON want:3M
 'Intended: He wants aunt to come.'
- g. *i ayshiga xeemú=wá* *slaa'* C
 3 aunt coming:M:CON=ABL want:3M
 'He wants aunt to come.'

3.5 Complements of the verbal noun with =*wa* (construction C)

Similar observations can be made for the patients of verbal nouns with the ablative case suffix. In (60), the patient with construct case of the verbal noun precedes the verbal noun within the core of the clause. The fact that a verbal adverb such as *adá* ‘quickly’ can intervene (60b) suggest that these are two separate noun phrases.

- (60) a. *daaqay i hikwaá fiisár=wá slaa' adoo-r-i-hee*
 boys.M 3 cattle:P:CON stealing:F:CON=ABL want:3M manner-F-DEM1-PRED
 ‘The boys want to steal the cattle like this.’
- b. *daaqay i hikwaá adá fiisár=wá slaa'*
 boys.M 3 cattle:P:CON quickly stealing:F:CON=ABL want:3M
adoo-r-i-hee
 manner-F-DEM1-PRED
 ‘The boys want to steal the cattle like this.’
- c. *daaqay i hikwaá slaa' fiisár=wá alé*
 boys.M 3 cattle:P:CON want:3M stealing:F:CON=ABL RESPRO
 ‘The boys want to steal the cattle.’
- d. *Aako i daaqoó fiisár-r=wá slaá'*
 g.father 3 boys:M:CON stealing:CON-F=ABL want:3M
 ‘Father wants the boys to steal.’
 ‘The boys want to steal father.’
 ‘Father wants to steal the boys.’
- e. *Aako daaqay g-u fiisár=wá slaá'*
 g.father boys O3-O.M stealing:CON-F=ABL want:3M
 ‘Father wants the boys to steal.’
 ‘The boys want to steal father.’
 ‘Father wants to steal the boys.’

The various structures of verbal nouns and their complements for constructions A and C are represented in Table 3. Construction B is so rare that it is not represented here. If the verbal noun is internal and its complement external then the object pronoun refers to that complement whether agent or patient. When both the verbal noun and its complement precede the inflection complex (i.e., are preposed), the complement precedes the verbal noun without construct case and hence as a separate phrase and this complement is referred by an object pronoun in the inflectional complex.

Table 3. Structures of semantic complements and verbal nouns as separate phrases

	Complement preverbal no object pronoun		Complement preposed object pronoun refers to patient/agent		Complement preposed object pronoun refers to preposed complement	
	Patient	Agent	Patient	Agent	Patient	Agent
A:	48, 59a	–	27, 54, 59b	29c	51c, 54	55
C:	20, 60a)–(c	59g, 60d	26	29b, 40, 41, 43, 60e	60e	51e, 55, 60e

3.6 Complements of the verbal noun with predicative -o (construction D)

If the verbal noun has the predicative suffix (construction D), the patient of the verbal noun must be an external object, as is clear from the variations of the examples in (61) below. The patient is clause initial and referred to by an object pronoun while the verbal noun with the predicative suffix can either precede the inflectional complex (61a), or follow the verb, (61b). There is strong preference for the complement not to be pre-verbal, (61c, d).

- (61) a. *imboru keemu-w-o g-u slaa'*
Mbulu.M going-M-PRED O3-O.M want:3M:PRES
'He wants to go to Mbulu.'
- b. *imboru g-u slaa' keemu-w-o*
Mbulu.M O3-O.M want:3M:PRES going-M-PRED
- c. **keemu-w-o i imború slaa'*
going-M-PRED 3 Mbulu:M:CON want:3M:PRES
- d. #*i imború slaa' keemu-w-o*
3 Mbulu:M:CON want:3M:PRES going-M-PRED

Once the verbal noun has the predicative suffix, it is only its complement that can be referred to by the object pronoun, not the verbal noun itself. And the object pronoun refers to the complement (patient or agent) noun irrespective of whether the verbal noun is pre-posed (62a) or after the main verb (62b). The verbal noun with *o* is never referred to with an object pronoun; it is not an argument of the clause.

- (62) a. *na/ii hiima uruxa-r-o ngu-na ii'ar-iyé'*
children rope.M pulling-F-PRED O3:DEP3:O.M-PAST try-3PL:PAST
'The children have tried to pull the rope.'

- b. *na/'ii hiima ng-u-n ii'ar~ar-iyá' uruxa-t-o*
 children.P rope.M PL: O3-O.M-EXPEC try~IMPFV-3PL pulling-F1-PRED
 'The children try to pull the rope.'

The object pronoun can refer to the agent of the verbal noun as in the variant of (46), with the agent preposed.

- (63) *Yesu g-u ya/a/án xeemú-w-o*
 Jesus O3-O.M believe:IMPFV:3M coming-M-PRED
 'He believes in the coming of Jesus.'

The verbal nouns take the *-o* suffix to function as predications within a clause. These minor predications are linked to the main predication of the clause as is evident from the fact that the object pronoun of the clause refers to the semantic patient (or agent) of the verbal noun and not of the main verb, and even the patient of the verbal noun can take up the role of subject of the main clause if the verbal noun and its object form the logical subject of the clause, see for example *gajeet* (f) 'work' in (64). The suffix *-o* allows its complement to play a syntactic role in the main clause.

- (64) *gajeét faakam-wo aa naká'*
 work.F finishing:IPFV1:P-PRED 3:PRF near:3F
 'The work is almost finished.'

Various positions of the verbal noun with the predicative suffix *-o* and its patient are possible. There are two restrictions: (1) The complement of the verbal noun, always precedes the main verb, and (2) it always precedes the verbal noun. In (73a) the verbal noun with the predicative suffix precedes the inflectional complex. Its complement, here referred to with the masculine pronoun *oo* referring to *tlaaqarmo* (m) 'lice', requires the masculine object pronoun *u* in the inflectional complex. In (66b), the verbal noun is moved to after the verb but its complement is still before the inflectional complex. In (66d) too the complement of the verbal noun moves to after the main verb. This order, Verb – Object – Verbal Noun-PRED, seems to contradict the first restriction (that the complement of the verbal noun always precedes the main verb), but note that in this sentence the inflectional complex contains the object pronoun *u* which refers to 'louse', and this object is again taken up by the independent masculine construct case pronoun *oo* needed as head for the following modification containing the verbal noun in which this complement pronoun *oo* still precedes the verbal noun, and the object pronoun *u* referring to the complement still precedes the main verb.

The patient seems to follow the verbal noun (and receive the predicative suffix) contrary to the restriction mentioned above in (65b). However, in (65b) the verbal noun has to be in construct case rendering the two nouns to be in one noun

phrase; leaving it out renders the sentence ungrammatical. Hence the patient and the verbal noun form one noun phrase. While the reverse is true for (65a) where the patient *do* 'house' cannot be put in construct case, and hence we have two separate independent noun phrases with the patient preceding the verbal noun.

Variation in order patient and verbal noun

- (65) a. *an-á toó qeeromamiís do' tleehtamu-w-o*
 1SG-1/2 in.vain think:1SG house building-M-PRED
 'I dream in vain of building a house.'
- b. *an-á toó qeeromamiís tleehtamú do'-o*
 1SG-1/2 in.vain think:1SG building:M:CON house:M-PRED
 'I dream in vain of building a house.'

A third restriction is that it is not possible to have the verbal noun with the predicative suffix *-o* within the verbal complex – (66e) is ungrammatical – and this is true for any phrase with the predicative suffix *o*. Other than these three restrictions nearly all positions and combinations are possible.

- (66) a. *oo bihhaá doó /iyáy arto g-u-na*
 INDEP.CON:M side:P:CON house:M:CON right seeing:FL:PRED O3-O.M-PAST
giiris.
 start:3F
 'The one (*tlaaqarmo* (m) 'louse') of the right side seeing, she started.'
- b. *oo bihhaá doó /iyáy guna giiris arto.*
- c. *arto oo bihhaá doó /iyáy guna giiris.*
- d. *guna giiris oo bihhaá doó /iyáy arto.*
guna giriis arto oo bihhaa doo /iyay
arto guna giriis oo bihhaa doo /iyay
- e. **oo bihhaá doó /iyáy guna arto giiris.*
- f. **oo [tlaaqarmo] bihhaá doó /iyáy aa giiris arto.*

There is one type of exception to restriction 1: The patient can be placed clause finally as an afterthought, (67). Such patients still trigger an object pronoun. The inflexional complex *a* in (67a) can either indicate a participant first or second person subject or a feminine object. It indicates a feminine object here because changing the patient to a masculine word like 'dog' changes the inflectional complex to a masculine object pronoun *u*, (67b).

- (67) a. */aymisi-r-o a aleeslaw-aán, maytsí.*
 feeding-F-PRED O.F be.able-1PL cat
 'We can feed the cat.'
- b. */aymisi-r-o u aleeslaw-aán, seeaay.*
 feeding-F-PRED O.M be.able-1PL dog
 'We can feed the dog.'

The complement of the verbal noun requires an object pronoun in the inflectional complex and hence (66f) is ungrammatical.³ In (68a) the object pronoun could in principle refer to the feminine verbal noun, but the only possible interpretation for this pronoun in the inflectional complex is a patient of the verbal noun. The verbal noun retains its semantic transitivity and requires a complement which becomes syntactically the object of the main verb.

- (68) a. *gaasa-r-o k-a-wa hhe'eés, ...*
 killing-F-PRED O3:IMPS-O_F-BGND finish:3M
 'And when they had finished killing her, ...'
 b. *gaasa-r-o k-u-wa hhe'eés, ...*
 killing-F-PRED O3:IMPS-O_M-BGND finish:3M
 'And when they had finished killing him, ...'

The various structures of the verbal noun with predicative suffix and its complement, construction D, are summarised in Table 4.

Table 4. Order of semantic complements and verbal nouns with predicative suffix -o

verbal noun precedes inflectional complex and complement precedes it	verbal noun precedes inflectional complex and complement follows verb as afterthought	verbal noun follows main verb and complement precedes inflectional complex	verbal noun follows main verb and complement precedes verbal noun
<i>pat</i> VN-PRED PRO _{PAT} V	VN-PRED PRO _{PAT} V, <i>pat</i>	<i>pat</i> PRO _{PAT} V VN-PRED	V <i>pat</i> VN-PRED
61a, 62a, 64, 66a	67	61b, 62b, 63, 66b	66d, 65a

4. Summary and conclusions

Iraqw has a number of morphological means to derive nouns from verbs. All of these can result in lexicalisations developing specific meanings but for a certain lexical verb it is the nominalisation that expresses the action of the verb that allows for the expression of arguments, irrespective of the actual nominalisation

3. It is possible to have a sequence *arto aa giiris* without an object pronoun in the inflectional complex but only if it appears in an object relative clause. Object relative clauses do not contain object pronouns referring to the object head noun and in a nominal clause like (i) one can have this sequence *arto aa giiris*






(i) *oo arto aa giiris oo bihhaá doó*
 INDEP.CON:M seeing:F1:PRED 3:PRF start:3F INDEP.CON:M side:P:CON house:M:CON
 /iyáy
 right
 'The one that she started seeing is the one on the right side of the house.'

morpheme. These arguments can be expressed as possessive elements in noun phrases, as noun or as possessive suffix. Both agents and patients can be expressed that way. Despite the fact that deverbal noun is otherwise fully nominal in morphological characteristics, the deverbal noun can occur in constructions in which its semantic argument (patient or agent) is expressed as an object to the main verb. There are four constructions to integrate a deverbal noun in a clause. The construction with a predicative suffix on the deverbal noun (D) allows for interpretations where the main verb and the verbal noun are seen as separable parts of the event. It allows its complement to play a syntactic role in the main clause. If the verbal noun receives the ablative case suffix (C) such an interpretation is equally possible but not imposed. The construction with the deverbal noun in preverbal construction (A) has a stronger semantic link between the two and the combination can have semantic arguments expressed as objects.

Abbreviations

1/2	first or second person	IMPFV	imperfective
1,2,3	first, second, third person	INDEP	independent
ABL	ablative	INDF	indefinite
BGND	background	INSTR	instrumental
COM	comitative	M	masculine
CON	construct case	M1	subgroup of masculine
COND	conditional	P	plural gender
COP	copula	NEG	negative
CSEC	consecutive	O	object
DEM	demonstrative (numbers refer to degree of distance)	PRES	present
DEP	dependent (clause)	PRF	perfect
DIR	directional	PL	plural
DUR	durative	POSS	possessive
EMPH	emphasis	PRED	predicative
EXPEC	expectational	PROH	prohibitive
F	feminine	REAS	reason
F1	subgroup of feminine	RES	resumptive (for verb)
HITH	hither	SG	singular
IMPS	impersonal	TR	transitive
IMP	imperative	VOC	vocative

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