Abstract

Norwegian allows an unergative verb to take an external DP/NP possessor with a body part noun, as in *Hun tråkket ham på føttene* ‘she stepped him on feet.DEF’. This construction is both similar to and different from other cases of possessor raising (Lødrup 2009a), and raises some challenges for syntactic analysis. This article gives a new account of the synchronic facts, and shows that the construction must have arisen through a reanalysis of the corresponding construction in Old Norse.

*Keywords*: Norwegian syntax, external possessors, possessor raising, body part nouns

1 Introduction

The terms external possession and possessor raising are used of constructions in which a possessor of a noun phrase denoting a body part is realized outside this noun phrase.

1. She kissed him on the cheek.
2. *Je lui casse le bras* (French)
   - *I him.DAT break the arm*
   - ‘I break his arm.’

It is clear, however, that external possession is not a unitary phenomenon (see e.g. Deal 2017). The two central types are those that Stump and Yadav (1988: 310) call possessor-to-host raising and possessor-to-dative raising. In possessor-to-host raising, as in (1), the sentence usually has a transitive verb, which gives its internal role to an object. This object is understood as the possessor of a body part noun, which is the object of a locative preposition. In some cases, possessor-to-host raising is also possible with unaccusative verbs, which realize the possessor in subject position. Possessor-to-host raising is common in the languages of the world (Haspelmath 1999: 219–23).

Possessor-to-dative raising as in (2), on the other hand, is primarily a European phenomenon (Haspelmath 1999). In the dative external possessor construction, the body part noun does not

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1 Happy birthday, Tibor! Time has flown since we were office mates at Stanford. I always enjoy our meetings and discussions of linguistics and other important matters (such as grandparenting).
have to be the object of a preposition. The external possessor is not included in the verb’s basic valency, but it is understood to be affected by the verbal action. This means that the dative external possessor fills an “extra” valency slot that has been added to the verb in question (differing from the external possessor with possessor-to-host raising).

In Lexical Functional Grammar (LFG), both types of possessor raising can be implemented as structure sharing between the dative possessor and the possessor function in the body part noun phrase. Body part nouns are assumed to take their possessor as an argument, as is common in the literature (see e.g. Vergnaud and Zubizarreta 1992).

Norwegian has possessor-to-host raising with transitive and some unaccusative verbs; examples are (3)-(4).

(3) Hun vasket babyen i ansiktet.
    she washed baby.DEF in face.DEF
    ‘She washed the baby in the face.’
(4) Han skalv på hendene.
    he trembled on hands.DEF
    ‘His hands trembled’.

Norwegian also has a construction that corresponds to possessor-to-dative raising. The possessor is realized as a PP with the preposition på ‘on’, as in (5).

(5) Hun vasket ansiktet på babyen.
    she washed face.DEF on baby.DEF
    ‘She washed the baby’s face.’

This PP can also be realized as a part of the body part noun phrase (comparable to the Hungarian dative possessor, see Laczkó 2017). This seems to be a case of of reanalysis (comparable to what happened in Hungarian, see Nikolaeva 2002). Lødrup (2018) shows that the internal possessor is a so-called prominent internal possessor, which shares syntactic and semantic properties with the external possessor. (For the purpose of reading this article, the reader could forget about the external – internal issue, and think of this possessor as external.)

The external possessor with the preposition på ‘on’ alternates with a DP/NP external possessor in some archaisms and fixed expressions, such as (6).

(6) De stakk ham en dolk i ryggen.
    they stabbed him a dagger in back.DEF
    ‘They stabbed a dagger into his back.’ [i.e. They betrayed him]

These cases aside, there is no general option for a DP/NP external possessor outside possessor-to-host raising. There is, however, an external possessor construction that might seem to be ambiguous with respect to the distinction between possessor-to-host raising and possessor-to-dative raising. Unergative verbs can take a DP/NP external possessor, as in (7).

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2 A complication is that the object and the possessor do not have identical requirements concerning form. Typically the object is dative, while the possessor is genitive. This fact can be stipulated using the so-called restriction operator (see e.g. Butt et al. 2003).
This was first pointed out and discussed in Lødrup (2009a). A new analysis is given in this article. I first show how unergatives are special in taking a DP/NP possessor (section 2). The syntactic function of the possessor is discussed in section 3, and shown to be a direct object. Section 4 shows how the unergative construction is different from possessor-to-host raising with transitives, realizing an “extra” affected argument. Section 5 has more discussion of affectedness. Finally, section 6 shows that the corresponding possessor object in Old Norse was an indirect object, and that the modern construction has arisen through reanalysis.

2 External possessors with one-place verbs

Unaccusatives and unergatives behave in different ways with respect to external possessors. Some unaccusatives allow possessor-to-host raising to subject position. An example is (4) above, repeated as (8).

(8) Han skalv på hendene.
   he trembled on hands.DEF
   ‘His hands trembled.’

Some unaccusatives allow the construction exemplified in (5) above, in which a PP with the preposition på ‘on’ is used as an equivalent to the “European” dative possessor. An example is (9).

(9) Hendene skalv på ham.
    hands.DEF trembled on him
    ‘His hands trembled.’

Unergatives are similar to unaccusatives – and all other verbs – in that they can take this PP possessor when they have the relevant meaning (more in section 5). An example is (10).

(10) Hun spyttet i ansiktet på ham.
     she spat in face.DEF on him
     ‘She spat in his face.’

Unergatives have no option for possessor-to-host raising to subject. However, they can take a possessor construction with an external DP/NP possessor that seems to be an object. This construction is the topic of this article. An example is (7) above, repeated as (11). These sentences are ungrammatical without the PP with a body part noun.

A på possessor does not sound so good when it follows another PP with på, cf. (i). This might be a performance phenomenon.

(i) Hun tråkket på fottene på ham.
    she stepped on feet.DEF on him
    ‘She stepped on his feet.’
(11) Hun spyttet ham i ansiktet.
    she spat him in face.DEF
    ‘She spat in his face.’

Unaccusatives do not have the option of realizing this external possessor as a DP/NP, except in some archaisms and fixed expressions, such as (12). (This example could be compared to example (6) above.)

    they fell Paul around neck.DEF
    ‘They embraced Paul.’

The unergative possessor construction in (11) might seem to be syntactically ambiguous. From one point of view, (11) resembles possessor-to-host raising with transitive verbs, such as (3) above, repeated as (13).

(13) Hun vasket babyen i ansiktet.
    she washed baby.DEF in face.DEF
    ‘She washed the baby in the face.’

From another point of view, (11) resembles possessor-to-dative raising. Note, however, that the external possessor in (11) is not a dative. Norwegian is not a case language; there is only a two-way distinction with some pronouns. There is not even a preposition with the possessor in (11), as there is in the synonymous (10) above.

Sentences such as (11) are completely productive with unergative verbs, if they have the relevant meaning (Lødrup 2009a). Some examples are given in (14).


With unergatives, one can choose between the synonymous DP/NP and PP possessors, as shown in (10)-(11) above. This choice does not exist with any other type of verb (except in archaisms and fixed expressions, such as (6) and (12) above). Cf. e.g. (15)-(16).

(15) Jeg brekker armen på ham.
    I break arm.DEF on him
    ‘I break his arm.’

(16) *Jeg brekker ham armen.
    I break him arm.DEF
    ‘I break his arm.’ [intended]
3 The syntactic function of the possessor

What is the syntactic function of the external DP possessor with unergatives? It looks like an object. However, object systems vary between languages. I assume the traditional analysis in Norwegian and Scandinavian grammar, in which a patient or theme is a direct object, while a benefactive is an indirect object, or OBJ, in ditransitive sentences such as (17).\(^4\)

(17) Hun ga ham blomster.
   she gave him flowers
   ‘She gave him flowers.’

This object system is also what is found in the European languages that have a dative external possessor construction. Haspelmath (1999: 124) says that this object system is a typological prerequisite for the dative external possessor construction. The dative external possessor is then an indirect object.

Eik (2014: 69–72) considers the possessor object with Norwegian unergatives as an indirect object. However, her neo-constructionist framework makes her premises different, and she goes far in accepting (what I take to be) archaisms and fixed expressions as relevant data.

The external possessor can correspond to a passive subject, as in (18).

(18) Han ble tràkket på føttene.
   he was stepped on feet.DEF
   ‘His feet were stepped on.’

Norwegian allows both direct and indirect objects to correspond to passive subjects (see note 4). However, this option only exists for indirect objects with ditransitive verbs, so (18) seems to give an argument that the possessor is a direct object.

Another argument concerns the presentational focus construction, in which an active or passive verb takes an expletive subject and an object. This construction is constrained by the indefiniteness requirement (as in several other languages): the direct object must be indefinite, cf. (19). There is no such requirement for indirect objects, however, cf. (20).

(19) Det ble overrakt en medalje / *medaljen.
    there was presented a medal / medal.DEF
    ‘A medal was presented.’
(20) Det ble overrakt soldaten en medalje / *medaljen.
    there was presented soldier.DEF a medal / medal.DEF
    ‘The soldier was presented with a medal.’

The external possessor with unergatives cannot be definite in presentational focus sentences, cf. (21). This again gives an argument that the possessor is a direct object.

\(^4\) A problem for this assumption – as well as other possible analyses of the object system – concerns the passive. The Norwegian passive is symmetrical, in the sense that both the direct and the indirect object can correspond to a passive subject. This is not discussed further here, see e.g. Lødrup (1995).
Another argument concerns the option of a cognate object. Some unergatives can take a cognate object, for example *hugge* ‘hew’. Example (22) shows that a cognate object can co-occur with a PP possessor. The verb can take a DP/NP possessor, as shown in (23), but it cannot take both a cognate object and a DP/NP possessor, as shown in (24). The reason must be that a cognate object is a direct object, which cannot co-occur with another direct object — the possessor object.

(22) Han hugget enda et hugg i halsen på ham.
    he hew another one blow in neck.DEF on him
    ‘He gave him another blow in the neck.’
(23) Han hugget ham i halsen.
    he hew him in neck.DEF
    ‘He hew him in the neck.’
(24) *Han hugget ham enda et hugg i halsen.
    he hew him another one blow in neck.DEF
    ‘He gave him another blow in the neck.’ [intended]

We see, then, that there are arguments that the external DP possessor with unergatives must be considered a direct object in Norwegian. Old Norse was different, as will be shown in section 6 below.

4 The difference between unergatives and transitives

An ergative with an external possessor realizes an argument structure that has been expanded by a lexical rule. This lexical rule inserts an extra thematic role, which will be called “affected” (see section 5). With unergative verbs, there are, as mentioned, two ways of realizing this thematic role. First, it can be realized as a PP with *på* ‘on’, which is assumed to be an indirect object, i.e. LFG’s OBJ. (This means that the preposition is treated as a grammatical marker.) This is an option that exists not only for unergatives, but also for other verbs with other valencies (Lødrup 2009b, 2018). An example with the unergative *spytte* ‘spit’ is (25), with the verb’s expanded lexical entry in (26).

(25) Hun spytet i ansiktet på ham.
    she spat in face.DEF on him
    ‘She spat in his face.’

(26) *spytte <(SUBJ) (OBJ_{affected}) (OBL_{locative})>*

Second, the extra affected role can be realized as a DP/NP, which is assumed to be a direct object, LFG’s OBJ. This option only exists with unergatives, as in (27), with the verb’s expanded lexical entry in (28).

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5 The lexical entry also needs the equation that structure shares the OBJ: $(\uparrow\text{OBJ}_0) = (\uparrow\text{OBL}_0 \ \text{OBJ POSS})$
Hun spyttet ham i ansiktet.
   she spat him in face.DEF
   ‘She spat in his face.’

‘spytte <(SUBJ) (OBJ) (OBL_locative)>’

The fact that unergatives can realize the affected role as a DP/NP object must be seen as a part of a more general phenomenon: Unergatives can to some extent take a DP/NP object, for example cognate objects, as in (29), and objects in resultative constructions, as in (30).

Han smilte et bredt smil.
   he smiled a broad smile
   ‘He gave a broad smile.’

Han tråkket gresset flatt.
   he stepped grass.DEF flat
   ‘He stepped the grass flat.’

Lexical Mapping Theory (LMT) distinguishes between what is called patientlike roles and secondary patientlike roles (see e.g. Bresnan et al. 2016: 331). In Norwegian and the languages with a dative external possessor construction, patientlike roles are e.g. theme or patient, while secondary patientlike roles are e.g. benefactive or recipient. Patientlike roles get the syntactic feature [-r], and are realized as OBJ or SUBJ. Secondary patientlike roles get the syntactic feature [+o], and are realized as an OBJ by general principles of LMT. The “extra” affected role will normally be treated as a secondary patientlike role, which means that it gets the syntactic feature [+o], and is realized as an OBJ by general principles of LMT. The reason is that a verb can only take one [-r] argument in Norwegian, as in many other languages (Bresnan & Moshi 1990). Unaccusatives have a [-r] subject, and transitives have a [-r] object – this makes it impossible for them to take another [-r] argument. Unergatives, on the other hand, have a subject with the syntactic feature [-o], and there is room for a “new” argument that is [-r].

Syntactically, the derived frame (28) for unergatives above is identical to the valency frame for regular possessor raising with transitive verbs, such as vaske ‘wash’.

‘vaske <(SUBJ) (OBJ) (OBL_locative)>’

However, the unergatives that take a possessor object cannot be considered regular transitive verbs. They only take an object when they have a PP with a body part noun phrase that the possessor can be raised from. The transitive (32) is grammatical without a PP, while the unergative (33) with an object is not.

Jeg vasket babyen.
   I washed baby.DEF
   ‘I washed the baby.’
Hun tråkket ham.
   she stepped him
‘She stepped on him.’ [intended]

The valency of the unergatives in question must be derived – just like the valency of the other verbs that take this external possessor construction. Differences from transitive verbs that take possessor raising show up with word formation rules that can be assumed to apply “before” valency-changing lexical rules.

One case concerns adjectival passives. Transitive verbs that take possessor raising have – as expected – adjectival passives whose logical subject corresponds to their object argument. An example is (34).

(34) en nyvasket baby
    a new.washed baby

Unergatives that take possessor raising don’t have adjectival passives, as expected, cf. (35).

(35) *en nyspyttet mann
    a new.spat man

Another difference between unergatives and transitives can be seen in nominalizations. Transitive verbs that take possessor raising allow – as expected – a PP corresponding to their object, as in (36). Unergatives that take possessor raising don’t (but (37) is marginally acceptable if the PP is interpreted as an agent).

(36) vasking av babyen
    washing of baby.DEF
(37) *spytting av mannen
    spitting of man.DEF

This object can also be realized as the first part of a compound – with transitives, as in (38), but not with unergatives (but (39) is marginally acceptable if the first part of the compound is interpreted as an agent)

(38) babyvasking
    baby.washing
(39) *mannsspytting
    man.spitting

In some cases, the line between unergative and transitive verbs is thin (Lødrup 2009a). Consider (40).

(40) Hunden slikket ham på hånden.
    dog.DEF licked him on hand.DEF
‘The dog licked his hand.’
In sentences without possessor raising, this verb has versions with a DP/NP OBJ or with a PP OBL, showing the conative alternation. Cf. (41)-(42).

(41) Hunden slikket hånden hans.
    dog.DEF licked  hand.DEF his
    ‘The dog licked his hand.’

(42) Hunden slikket på hånden hans.
    dog.DEF licked on hand.DEF his
    ‘The dog licked on his hand.’

With an OBJ, slikke ‘lick’ is a regular transitive verb. With an OBL, it is an unergative. This means that (40) is syntactically ambiguous between the two types of possessor raising.

Other cases show the necessity of distinguishing sharply between unergatives and transitives. Consider (43).

(43) Jeg hugget ham i hjertet. (www)
    I    hew   him in heart.DEF
    ‘I gave him a blow in his heart.’

The verb hugge ‘hew’ can take a regular thematic object. However, this object denotes an object such as wood or stone, it cannot normally denote a person. Even so, it takes an object denoting a person when used with possessor raising, such as in (43). This shows clearly that the option with possessor raising must be based upon the unergative version of hugge ‘hew’.

5 Affectedness

In Lødrup (2009a), the external possessor in sentences with ergative verbs was treated in the same way as the object in resultative constructions. It was assumed to get a thematic possessor role from the body part noun, but no role from the verb or the construction. This was criticized briefly in Eik (2014: 53), who compares (44) with an unergative verb, and (45) with a transitive verb (Nynorsk Norwegian examples):

(44) Eg trakka ho på foten.
    I    stepped  her on foot.DEF
    ‘I stepped on her foot.’

(45) Eg kyssa ho på munnen.
    I    kissed  her on mouth.DEF
    ‘I kissed her on the mouth.’

Eik (2014: 53) remarks that there can be little doubt that the subjects are equally affected by the verbal action in these sentences. This criticism seems to be correct.

There are different ways of using the term affected in the literature, as pointed out by Lee-Schoenfeld and Diewald (2014: 291). Sometimes it is used of a typical patient. However, the use that is relevant in this context is a different one:

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6 This point was independently brought to my attention by Dr. Tanya Nikitina, CNRS, Paris (pc).
‘taking part in the situation as an empathetic, necessarily animate co-participant’, i.e. sharing some features of a typical agent, without, however, being an agent because not having control (Lee-Schoenfeld & Diewald 2014: 288).

This is the interpretation we find with the PP possessor with the preposition på ‘on’ (Lødrup 2018). It is also the interpretation we find when an unergative takes an external DP/NP possessor. There is a potential difference from a sentence with an ordinary internal possessor. The latter does not have to be interpreted as affected. It does not presuppose that the possessor is conscious. Compare (46)-(47).

(46) Hun blåste ham i øret.
    she blew him in ear.DEF
    ‘She blew into his ear.’

(47) Hun blåste i øret hans.
    she blew in ear.DEF his
    ‘She blew into his ear.’

Example (46) with an external possessor clearly pictures the possessor as affected – she blows into his ear to caress him or tease him. Example (47) with an internal possessor might be used of the same situation, but the possessor does not necessarily have to be affected (in the relevant sense) – for example, he might be unconscious, and she might blow into his ear to remove an insect.

The transitives that allow possessor-to-host-raising do not require affectedness in the sense discussed above. One can talk about washing somebody in the face even if this person is unconscious. A clear argument that regular transitives are different from unergatives in this respect comes from nouns denoting spatial relations, such as e.g. top. These nouns have an argument position, just like body part nouns. They behave the same way in several respects, and are usually considered inalienable nouns (see e.g. Chappell & McGregor 1996, Heine 1997: 1.2.1). Transitives allow possessor raising with spatial relational nouns, but not unergatives, as shown in (48)-(49).

(48) Jeg vasket madrassen på oversiden.
    I washed mattress.DEF on top.side.DEF
    ‘I washed the top side of the mattress.’

(49) *Jeg tråkket madrassen på oversiden.
    I stepped mattress.DEF on top.side.DEF
    ‘I stepped on the top side of the mattress.’ [intended]

This difference was pointed out in Johannessen et al (2014: 84). They do not say why this is so. The reason must be that there is an affectedness effect of possessor raising with unergatives, but not with transitives.
6 The change from Old Norse

Old Norse (ca. 700-1350) had the “European” dative external possessor construction. The external possessor was realized as a morphological dative. (Old Norse distinguished morphologically between nominative, accusative, genitive and dative.) One example from Faarlund (2004: 171) is (50).

(50) ok fell fyrir foetr Þorkatli. and fell before feet.ACC Thorkel.DAT ‘And [he] fell before Thorkel’s feet.’

Unergative verbs took dative external possessors in Old Norse. Skard (1951: 54) gives examples such as (51).

(51) hjó Grímr með óxi milli herða honum. hew Grímr with axe between shoulders him.DAT ‘Grím hew between his shoulders with an axe.’

The verb in (51) is the unergative hǫggva ‘hew’. This Old Norse verb could take a cognate object – just like its Modern Norwegian reflex hugge (example (22) above). There is a difference, however: Old Norse allowed the cognate object to co-occur with the DP/NP external possessor, as in (52).

(52) en annat högg hjó hann á hals honum. (Ívens saga, page 133) and another blow hew he on neck him.DAT ‘And he gave another blow on his neck.’

The cognate object is the accusative direct object, and the dative possessor object that it co-occurs with cannot be another direct object. Dative possessor objects are usually assumed to be indirect objects in European case languages, and this analysis must also be assumed for Old Norse – for unergatives as well as for other verbs. This is a striking difference from Modern Norwegian (examples (22)-(24) above), where the DP/NP object with unergatives is a direct object, and cannot co-occur with a cognate object.

The case system of Old Norse disappeared hundreds of years ago. A development that started already in Old Norse was the use of a PP instead of a dative DP/NP (Skard 1951, Knudsen 1961). In the case of external possessors, á ‘on’ was the preposition used to replace the dative. Example (53) (from Skard 1951: 56) is from the 14. century.

(53) þu skalt ei vita fyr en ek hifuir uppi iliannar a þer. you shall not know before than I raise up heels on you ‘I will throw you upside down before you notice.’

This preposition later took the form pá, which is still used with external possessors corresponding to the Old Norse dative possessors.

It is striking that this very general change from dative DP/NP to PP did not rule out the option of a DP/PP external possessor in sentences with unergative verbs. What seems to have happened is that the external DP/NP possessor with unergatives has been reanalyzed as a direct object at
some point in time. This seems to be a natural development, when the object position is usually empty (except in cases like (52) above), morphological case is on its way out, and unergativity licenses a direct object.\footnote{The actual development from Old Norse to Modern Norwegian is difficult to investigate. For some centuries, the sources available are difficult to interpret, for other centuries, they are almost totally missing.}

A central use for the Old Norse dative is to mark arguments denoting a participant with a thematic role in the field of benefactive/malefactive/affected. In Modern Norwegian, a descendant of an Old Norse dative is only realized as a DP/NP when it is selected by the basic valency of a predicate, such as for example the indirect object of gi ‘give’, or the direct object of hjelpe ‘help’. Norwegian is similar to English in this respect, but even more reluctant to allow a DP/NP. Apart from the external possessor with unergatives discussed here, it is difficult to find cases of a DP/NP benefactive/malefactive/affected argument that extends the basic valency of a predicate. For example, it has been observed that most dialects of Norwegian do not have “derived” DP/NP indirect objects (as opposed to English). Most Norwegians do not accept sentences such as (54)-(55), in which verbs of production and bringing take a benefactive object in addition to the theme object (Lundquist 2014).

(54) *Han bakte gjesten en kake.
    he baked guest.DEF a cake
    ‘He baked the guest a cake.’
(55) *Han hentet henne en stol.
    he fetched her a chair
    ‘He fetched her a chair.’

This reluctance to realize a benefactive/malefactive/affected argument as a DP/NP makes the case of the external DP/NP possessor with unergatives even more striking.

7 Conclusion

The DP/NP external possessor with unergatives realizes an “extra” affected argument, just like the PP possessor with på ‘on’. The DP/NP option follows from Lexical Mapping Theory, and must be seen as a part of the more general ability of unergatives to take a DP/NP direct object. Historically, this object has arisen through a reanalysis of the Old Norse dative external possessor, which has become what could be seen as an accusative external possessor.

References


http://www.tekstlab.uio.no/nals/chapter_text/7/doubleobjectsactive.htm
