Abstract. In this article it is shown that the Heerlen Dutch construction *Het riet buigt zich* ‘the reed bends refl’ crucially differs from its Standard Dutch counterpart. Instead, it has properties very similar to the ones of the French construction *La branche se casse* ‘the branch refl breaks’. First, it is argued that both the Heerlen Dutch and the French construction are ergative intransitive counterparts of transitive change of state verbs with a Causer as external argument. Secondly, it is shown that in the ergative constructions *zich/se* act as an aspectual marker, namely the aspectual focus is on the end-point of the event. We will claim that this specific aspectual function of the reflexive element is not language specific but that it is a general property of “reflexive” languages of both the ‘Roman’ and the ‘German’ type.

1. Introduction

In Heerlen Dutch (henceforth: HD) transitive change of state verbs, such as *bewijzen* (prove), *breken* (break), *drogen* (dry), *koken* (cook), *krullen* (curl), *smelten* (melt) and *veranderen* (change) may give rise to two inchoative counterparts: a reflexive *zich* and an intransitive counterpart, as is shown in (1a) and (1b), respectively. Contrary to what is the case in HD, in Standard Dutch (henceforth: SD) the appearance of the *zich* counterparts is (i) very restricted and (ii) “far from regular” (Everaert 1986: 83):

(1) a. HD/?*SD Het riet buigt zich
   the reeds bends refl
   ‘the reed is bending’

b. HD/SD Het riet buigt
   the reed bends
   ‘the reed is bending’

Interestingly, in French, as is the case in HD, many transitive change of state verbs give rise to both a reflexive and an intransitive counterpart as is exemplified in (2a) and (2b) respectively (Zribi-Hertz 1987)ii. These French constructions have had quite some attention in the literature (see e.g. Lagae 1990, Labelle 1990&1992, Zribi-Hertz 1987 and Ruwet 1972):

(2) a. La branche se casse
Both Labelle and Zribi-Hertz have convincingly argued in favour of an ergative analysis for the French reflexive construction in (2a). Moreover, all authors agree in noticing an aspectual difference: it has been observed that in the reflexive construction in (2a) the aspectual focus is on the end-point of the event, whereas in the intransitive construction in (2b) the focus is on the process.

The purpose of this paper is to show that the reflexive HD construction in (1a) has essentially the same syntactic and aspectual properties as its French counterpart in (2a). We will claim that the reflexive HD construction in (1a) is in fact an ergative construction in which *zich*, just like the French *se*, acts as an aspectual marker, namely that of focusing on the end-point of the action.

It is intriguing that in HD this specific aspectual function can also be found in another type of reflexive construction, namely the dative *zich* construction in (3a). Similar to the reflexive construction in (1a), the dative *zich* construction in (3a) denotes a state of affairs that can be described as the end-point of the action. Note that (3a) is ungrammatical in SD:

(3) a. HD/*SD Jan eet *zich* een boterham
    Jan eats refl a sandwich
    ‘Jan eats a (whole) sandwich completely’

b. HD/SD Jan eet een boterham
    Jan eats a sandwich

Recently, it has been argued that also in Spanish the reflexive *se* acts as an aspectual marker in the following dative *se* construction. As in HD, the aspectual focus in the Spanish reflexive construction in (4) is on the end-point or the final state of the entity (Zagona 1994, Almagro 1993, Nishida 1994):

(4) Juan se comió una manzana
    Juan refl eats an apple
    ‘Juan eats an (whole) apple completely’

In order to account for these striking aspectual properties of both *zich* and *se* in syntax we like to propose for the reflexive constructions in (1a) and (2a) the structure in (5a) and (5b), respectively in which a functional projection AspP is selected by the verb. It is suggested that this functional projection takes a small clause as its complement in which the NP’s *het rietilla branche* (the branch) occupy the subject position of this small clause:

(5) a. \[ VP [AspP [SC [ het riet e] zich]] buigen] 

b. \[ VP casser [AspP [se SC [la branche e]]] ]
We will demonstrate that various interesting properties of the *zich/se* constructions in HD and French follow from this proposal.

1.1 Organization

This paper is organized as follows. In the first part we will apply several diagnostic tests to show the ergative properties of the HD reflexive construction in (1a). In the second and third part, we will focus on the aspectual properties of both this ergative reflexive and other reflexive constructions in HD and French (Spanish). In the last section we will propose a structural analysis to account for the aspectual similarities of reflexive constructions in HD and French.

2. Ergativity

Within HD the reflexive *zich* occurs in a much wider range of constructions then in SD, for instance in middle, impersonal passive and double object constructions (cf. (3a); Cornips 1994). Of course, one could argue, however, that the HD reflexive counterpart such as (1a) has syntactic properties similar to regular transitive reflexive constructions in SD. In this section, we will briefly discuss this type in SD that is also fully grammatical in HD. But before we start, we like to point out that although we will discuss SD transitive reflexive constructions in order to gain a better insight in the syntactic properties of the HD reflexive counterparts we do not want to take into account yet the parametric differences between HD and SD with respect to *zich*. The purpose of this section is to demonstrate that the status of *zich* in the HD counterpart crucially differs from the status of *zich* in the transitive SD/HD constructions.

2.1 Regular SD/HD transitive reflexive constructions

Let us first demonstrate that the HD reflexive counterpart and the SD/HD transitive reflexive structure in (6a) and (6b), respectively, do not have the same argument-licensing structure. In that case in the HD reflexive counterpart in (6a) (i) *zich* would have the thematic role of the internal argument and (ii) *het riet* (the reed) the thematic role of the external argument of the transitive verb *buigen*:

(6) a. HD/?*SD Het riet buigt *zich*
    the reed bends refl
b. HD/SD Jan wast *zich*
    Jan washes refl

However, if the element *zich* in (6a) has the same argumental status as in (6b), we expect at least some syntactic similarities with respect to the element *zelf* (‘self’) since both in SD and in HD it is possible to combine *zich* with the element *zelf* if it is an internal argument. Now, compare the following examples in (7)iii:

(7) a. HD/SD Jan wast *zichzelf*
    Jan washes himself
b. HD/SD  *Het riet buigt zichzelf
the reed bends itself

The indicated contrast in the examples in (7) comes as a surprise if both ‘zich’’s have the same argumental status. It may be accounted for, however, by assuming that zich in (7b) is not an internal argument.

Similarly, Ruwet (1972) demonstrates that in the corresponding French construction se in regular transitive reflexive constructions can be replaced by elle-même (herself) in a focal context, whereas this is impossible in ergative constructions as in (8b) and (9b), respectively:

(8) a. Marie se lave
Marie refl washes
b. Mariene lave que elle-même
Marie washes only herself

(9) a. La branche se casse
the branch refl breaks
b. *La branchene casse qu'elle-même
the branch breaks only herself

With respect to (ii), if the HD reflexive construction in (6a) is a regular transitive reflexive construction embedding under causative laten (let) is predicted to be grammatical since this verb takes an infinitival transitive reflexive verb as its argument. As is illustrated by means of the transitive reflexive construction and the HD reflexive counterpart in (10a) and (10b) respectively, this expectation is not borne out\textsuperscript{v}.

(10) a. SD/HD  Moeder laat de kinderen zich wassen
mother lets the children refl wash
‘Mother has the children washed themselves’
b. SD/HD  *Moeder laat het riet zich buigen
mother lets the reed refl bend

According to Everaert (1986:89) the ungrammaticality of the example in (10b) follows from the fact that het riet (the reed) is not an agentive external argument which is required by causative laten.

Moreover, since we claim that the HD and the French reflexive counterparts are indeed constructions without an external argument, the impossibility of construing these constructions with a control complement or with an agent-oriented adjunct follows immediately, as is exemplified in (11) and (12), respectively\textsuperscript{v}:

(11) a. HD  *Het riet buigt zich om bescherming te vinden
the reed bends refl comp protection to find
‘the reed is bending in order to find protection’
b. HD  *Le verre se casse pour ennuyer les gens
the glass refl breaks comp annoy the people
‘the glass is breaking in order to annoy the people’

(12) a. HD *Het riet buigt zich opzettelijk
              the reed bends refl deliberately
b. HD *Le verre se casse délibérément
              the glass refl breaks deliberately

For completeness, it is very important to indicate that if in HD the surface subject of a reflexive construction carries the feature [+human], the construction is necessarily interpreted as a regular transitive reflexive construction (cf. (13a)). Of course, the external argument in the transitive reflexive construction can control a PRO subject in a purpose clause or license an agent-oriented adjunct:

(13) a. SD/HD Jan buigt/wast zich
              Jan bends/washes refl
Jan bends/washes refl
b. SD/HD Jan buigt/wast zich om de mensen te vervelen
              ‘Jan is bending/washing (himself) in order to annoy the people’
c. SD/HD Jan buigt/wast zich opzettelijk
              Jan bends/washes refl deliberately

Summarizing, we have indicated briefly that the HD reflexive counterpart differs from the SD/HD regular transitive reflexive construction in that (i) *zich is not an internal argument or an object and (ii) the surface subject does not act as an agentive external argument.

In the following sections we will discuss extensively the argumental status of the surface subject of the HD reflexive counterpart.

2.2 Ergativity tests

In this section we will claim that the HD reflexive counterparts, as in (1a) are ergative, just like the French ergative se construction. For this reason, we apply some of the well-known ergativity tests. We will show that this HD construction corresponds closely to the French ergative se construction (cf. (2a)).

2.2.1 Participle-adjective conversion

In the literature a number of tests has been discussed that distinguish ergative verbs from intransitive, unergative verbs (see e.g. Hoekstra 1984: 211). First, we will concentrate on the participle-adjective conversion. In general, participles can be used as predicates over nouns which correspond to their initial direct object. In both French and HD/SD ergative verbs allow their past participles to be used as an adjective predicating over the surface subject. Unergative verbs, on the other hand, do not permit this.

If we try to apply this test, a very interesting result arises. Strikingly, in HD the participle of the ergative construction can be used as an adjective predicating over the surface subject, as is demonstrated in (14a) (Note that this example is ungrammatical in SD). The participle of a regular transitive construction, by contrast, gives rise to an
ungrammatical result if it is used as an adjective predicking over the surface subject (cf. (14b)):

\[(14) \ a. \ HD/*SD \ Het \ \textit{zich}\ \textit{gebogenriet} \\
\textit{the refl bent reed} \\
b. \ HD/SD \ *Het \ \textit{zich} \ \textit{gewassen} \ \textit{kind} \\
\textit{the refl washed child} \]

The grammaticality of the example in (14a) can be explained by assuming that the surface subject \textit{het riet} (the reed) is an internal argument. Therefore, the indicated contrast in (14a-b) points in the same direction as the data in the examples (10)-(13) above; it clearly suggests that the HD reflexive counterpart does not have an external argument.

In French clitics always attach to INFL and, hence, they never attach to participles (see Kayne 1991). As a consequence, participle-adjective conversion can not be used as a test in French and the ungrammaticality of the example in (15) does not show anything.

\[(15) \ *La \ \textit{branche} \ \textit{se cassée} \\
\textit{the branch refl broken} \]

2.2.2 Impersonal passivization

The second distinguishing property is that in Dutch and in French an unergative intransitive verb\textsuperscript{vi} allows for impersonal passivization, whereas impersonal passivization is blocked in the case of an ergative verb. Now consider the following examples:

\[(16) \ a. \ *Il \ \textit{s'} a été cassé\textsuperscript{vii} \\
\textit{thererefl has been broken} \\
b. \ HD/SD \ *Er \ \textit{wordt} \ \textit{zich} \ \textit{gebroken} \\
\textit{thereis refl broken} \]

In the examples in (16) the reflexive counterparts pattern with ergative verbs in both French and in HD. Furthermore, in HD there is a sharp contrast between the ungrammaticality of the example in (16b) and the grammaticality of the impersonal passive of a transitive regular reflexive verb\textsuperscript{viii}:

\[(17) \ HD/*SD \ Er \ \textit{wordt} \ \textit{zich} \ \textit{gewassen} \\
\textit{there is refl washed} \]

Since the HD reflexive counterpart passes two independently established ergativity tests\textsuperscript{ix} we adopt the view that the surface subject in the reflexive counterpart is an internal argument. Since this is what we first wanted to demonstrate, we can now proceed to the discussion of the status of the reflexive \textit{zich}/\textit{se}.

2.3 The ergative reflexive: the suppression of a Causer external argument
In this section we will demonstrate that the HD and the French ergative reflexive construction is the intransitive counterpart of a causative transitive construction with a Causer external argument.

In French, Zribi-Hertz (1987) has convincingly shown that the ergative reflexive counterpart is related to a transitive construction that does not take an agentive, but a causative external argument. Here, we briefly repeat her observations. The French ergative construction combines easily with a prepositional complement which expresses (indirectly) the cause of the change of state expressed by the verb. Consider the following examples:

(18) a. La branche s'est cassée sous l'effet de l'ouragan
    the branch refl is broken under the effect of the hurricane
b. Le métal s'est rouillé avec l'humidité
    the metal refl is rusted with the dampness
c. Le piton s'est dessellé sous la secousse
    the screw refl is come loose by the jolt

In French, it is interesting that if the surface subject carries the feature [+human], such as (19), reflexive constructions are ambiguous between a regular transitive reflexive reading in which the subject is interpreted as an agens and an ergative interpretation in which the subject is non-agentive (Recall that in HD only the regular transitive reflexive reading is possible above (cf. (13)):

(19) Alfred s'abîme
    Alfred refl dulls

Evidence that we are indeed dealing with an ergative construction in the example in (19) is the fact that only the ergative interpretation is possible if we add a PP as a causal circumstance (Zribi-Hertz 1987: 35):

(20) Alfred s'abîme sous l'effet de ses lectures
    Alfred refl dulls under the effect of his lectures

Transitive reflexive constructions, such as (21), allow only the agentive interpretation and give rise to an ungrammatical result if it is combined with a causative PP:

(21) *Les soldats se sont réunis sous l'effet des grenades
    the soldiers refl are gathered under the effect of the grenades

Now, we like to demonstrate that also the HD reflexive ergative construction is related to a transitive construction that does not take an agentive, but a causative external argument. Consider the following example in which the transitive verb *waaien (blow) permits only a causative subject.

(22) HD/SD De wind/*Marie waait de papieren uit de doos
    the wind/ Marie blows the papers out the box
As predicted, the reflexive ergative construction is possible:

(23) HD/*SD De papieren waaien *zich uit de doos
the papers blow refl out the box

As can be seen in the examples in (24), there are, however, also transitive verbs that allow both an agentive and a causative subject. We would expect that if the agentive subject is selected, as in (24a), the HD reflexive ergative construction is impossible, whereas the opposite holds if a causative subject is chosen, as in (24b). Again, these predictions are borne out, as is illustrated in (25a) and (25b), respectively.

(24) a. HD/SD Marie/*het weer verandert de winkel
Marie/ the weather changes the store
b. HD/SD Het hogedrukgebied /*Marie verandert het weer
the high-pressure area / Marie changes the weather

(25) a. HD/*SD ?*De winkel verandert *zich
the store changes refl
b. HD/*SD Het weer verandert *zich
the weather changes refl

Furthermore, as we also observed in French (cf. (18)), it is possible in HD to construe the reflexive ergative construction with a prepositional phrase that serves as a causal circumstance:

(26) a. HD/*SD Het riet buigt *zich in de wind
the reed bends refl in the wind
b. HD/*SD De haren krullen *zich in de zon
the hairs curl refl in the sun

Conversely, if in HD the same PP is linked to a regular transitive reflexive construction, it can only be interpreted as an adverbial phrase of place:
Finally, notice that if the preposition *door/par* precedes this causative PP, the HD and French reflexive ergative construction give rise to an ungrammatical result x:

(28) a. HD *dat door de wind het riet zich gebogen heeft*
that by the wind the reed refl bent has
b. *La branche s'est cassée par l'effet de l'ouragan*
The branch refl is broken by the effect of the hurricane

From these facts, we may safely conclude that the French and the HD are ergative counterparts of transitive constructions that take a causative external argument. Although we assume that in the ergative reflexive construction *zich/se* is not an argument, it may be the manifestation of the non-projection of this causative external argument into syntax xi.

In the next section, we will show that both in French and in HD the presence of *zich/se* restricts the aspectual interpretation of the construction. This aspectual restriction can be accounted for if we assume that the verbs can select a functional projection AspP in which *se/zich* can be generated.

### 3. *se/zich* as aspectual marker

In Zribi-Hertz (1987), it has been observed that in French the intransitive and the reflexive counterparts of transitive verbs differ with respect to aspectual properties. According to her, the ergative reflexive construction implies perfectivity, whereas the intransitive construction implies imperfectivity. Lagae (1990), however, points out that Zribi-Hertz uses the opposition perfective/imperfective in a rather confusing way. Sometimes the opposition refers to a lexical property of the verb and sometimes it refers to a property of the whole proposition. It is for this reason, that before we start discussing the aspectual differences with respect to the French and the HD data, we want to briefly introduce the notion of Aspect such as we will use it here.

#### 3.1 The compositional nature of event structure

Generally, it is assumed that a distinction must be made between two types of aspectual notions, in particular (i) Aktionsart and (ii) presentational aspect. The first notion (Aktionsart) expresses the inherent aspectual properties of a verb. Vendler's well-known categorization of verbs in states, activities, achievements and accomplishments is based on lexical and semantic properties of the verb and, as a consequence it refers to the notion of Aktionsart.

Aktionsart is also referred to as the event structure of the verb, for example by Grimshaw (1990). If the event structure of a verb is combined with elements in the clause,
it provides an event structure for the entire sentence. This resulting event structure refers to
the second notion of Aspect, namely ‘presentational’ aspect. Here, notions such as
(im)perfectivity and progressive play a role. These notions describe the way in which an
event is depicted: as completed, incomplete or ongoing. Hence, they are related to temporal aspect

The Aspect or the event type of a sentence is the result of the interaction between the
Aktionsart of the verb and the aspectual properties of tense markers and adverbial complements. Pustejovskij (1992) expresses this interaction in the following way. He
defines achievements and accomplishments as transitions, whereas he defines activities and
states as processes. Transitions are said to be telic, or rather, they have an inherent
boundary or end-point as opposed to processes which are said to be atelic. According to
him, in English the resultative construction involves a systematic event-type shift from
processes to transitions as is illustrated in (29a) and (29b), respectively:

(29) a. Mary hammered the metal
    b. Mary hammered the metal flat

That the resultative constructions involve event composition is also suggested by Hoekstra
(1992:161) who states that the resultative Small Clause [the metal flat] must be licensed
through the binding of its e-rol by the event structure of the governing verb. This
assumption corresponds to Grimshaw’s intuition that the event structure of the clause
represents the aspectual analysis of the entire sentence and that it determines, for example,
whether adjuncts are admissible or not and what the scope of certain elements will be.

Furthermore, Di Sciullo and Klipple (1993) distinguish different levels of aspectual
modification. According to them, there are aspectual modifiers that can only supply more
information about the existing aspectual structure whereas other aspectual markers add or
change the aspectual structure. Compare for instance the following constructions:

(30) a. The river froze
    b. The river froze solid

(31) a. The bottle broke
    b. The bottle broke open

According to Pustejovsky (1992) the adjectival predicates solid and open in the (b)-
sentences respectively, do not alter the event structure of the corresponding (a)-sentences.
These AP’s merely constitute an attribution to the state that is already introduced by the
transition verb itself.

The question that arises, then, is how is the aspectual interpretation of the ergative
reflexive construction obtained? Or, to be more precise, at which level does the aspectual
modification take place?

3.2 Se /zich and aspectual properties

Labelle (1992) has convincingly shown that it is impossible to claim a clear cut
complementary distribution between the French verbs that occur in the intransitive and in
the ergative reflexive constructions\textsuperscript{xiii}. Both types of constructions involve change of state verbs which are said to be transitions expressing telicity or inherent boundedness. Therefore, the aspectual differences between the two constructions are more subtle, depending on the way in which the speaker wants to present the situation. According to Labelle, and we agree with her, in the intransitive construction the (aspectual) focus is on the process of transformation of the entity in subject position, whereas in the ergative reflexive construction the (aspectual) focus is on the end-point or the final state of that entity\textsuperscript{xiv}. So, the presence versus absence of \textit{se} has an influence on the event structure of the whole sentence.

We assume that \textit{se} is an aspectual marker that is related to the notion of presentational aspect in representing a certain view point on a (telic) event. Although one could say that \textit{se} is related to a subpart of the event that is expressed by the verb, the presence of \textit{se} does not alter the Aktionsart of the verb nor does it modify (sub) parts of events that are characterized by the verb. So, we like to propose the following. If we consider accomplishments as complex events that consist of an activity and a state, the ergative reflexive focusses on the \textit{state} part of the event, whereas the intransitive construction focusses on the \textit{activity} part of the event expressed by the verb. Another way of putting this is that in the ergative reflexive construction \textit{se} has the same role as the adjectival predicates \textit{solid} and \textit{open} in the constructions (30b) and (31b) above. It attributes to the state introduced by the event structure of the (unaccusative) verb itself.

Compare to this end the following ergative reflexive constructions in French and in HD. In French, this type of construction gives rise to an ungrammatical result if it is combined with an adverbial phrase expressing duration, whereas it is fully grammatical if it is linked to an adverbial phrase expressing a specific point in time as, can be seen in (32) and (33), respectively. The same holds for HD:

\begin{itemize}
\item (32) a. *Le poulet s’est cuit \textit{pendant 3 heures} \\
the chicken refl is cooked during 3 hours
\item b. HD/SD *dat het ei \textit{zich 3 minuten lang} gekookt heeft \\
that the eggrefl for 3 minutes boiled has
\item (33) a. Le poulet \textit{s’est cuit en très exactement 30 minutes} \\
the chicken refl is boiled in very exactly 30 minutes
\item b. HD/*SD dat het ei \textit{zich in 3 minuten tijd gekookt heeft} \\
that the egg refl in 3 minutes time boiled has
\end{itemize}

Contrary to what is the case in the examples in (32), the intransitive constructions can easily combine with a durational adverb:

\begin{itemize}
\item (34) a. Le poulet \textit{a cuit pendant 3 heures} \\
the chicken has cooked during 3 hours
\item b. HD/SD dat het ei \textit{3 minuten lang} gekookt heeft \\
that the egg for 3 minutes boiled has
\end{itemize}

But, the intransitive constructions can also easily be construed with a durational adverb expressing a specific point in time:
The data in the examples (33)-(35) clearly demonstrate that the presence of zich/se does not alter the Aktionsart of the verb nor does it modify (sub)parts of events that are characterized by the verb. Rather, as we have mentioned above, it attributes to the state introduced by the event structure of the (unaccusative) verb itself. It is for this reason, that we consider se/zich as an aspectual marker which supplies more information about the existing aspectual structure.

In the following section we will show that reflexives (i) in another type of construction and (ii) in another language such as Spanish have similar aspectual properties as in the ergative reflexive construction in French and HD.

3.3 Aspectual properties of the dative zich/se in HD, Spanish and French

In this section we will provide more data which demonstrate that zich/se acts as an aspectual marker. Consider in HD the following corresponding transitive constructions denoting consumption with and without a reflexive in (36) and (37), respectively:

(36) a. HD/*SD Zij eet zich een boterham
She eats refl a sandwhich
b. HD/*SD Zij drinkt zich een bier
She drinks refl a beer

(37) a. HD/SD Zij eet een boterham
She eats a sandwhich
b. HD/SD Zij drinkt een bier
She drinks a beer

First, in analogy with the ergative reflexive (cf. (32b)) in HD the dative reflexive construction is ill formed if it is combined with an adverbial phrase expressing duration (cf. (38a)), whereas the construction is fully grammatical if it is linked to an adverbial phrase indicating an end-point of the action expressed by the predicate (cf. (38b)). Note that the corresponding HD/SD constructions without zich are again fully acceptable with both types of adverbial phrases:

(38) a. HD/*SD *Zij eet zich 5 minuten lang een boterham
She eats refl for 5 minutes a sandwhich
b. HD/*SD Zij eet zich binnen 5 minuten een boterham
She eats refl in 5 minutes time a sandwhich

c. HD/SD  Zij eet 5 minuten lang/binnen 5 minuten een boterham
She eats for 5 minutes/in 5 minutes time a sandwich

Interestingly a similar phenomenon is found in Spanish where the reflexive se acts as an aspectual marker and has been analyzed as having an aspectual role involving telicity (Nishida 1992, Zagona 1994, Almagro 1993). According to Almagro (1993: 136), in Spanish sentences with transitive ‘consumption’ verbs the presence of se such as in (39a) and (40a) expresses the delimitation of the event, or rather, it expresses the consumption of the totality of the drank/food. Nishida (1992: 442) also claims that the constructions with se highlight the fact that the totality of an object is involved in the situation or that the event is completed. It looks as if the HD and the Spanish reflexive dative construction exhibit the same aspectual properties:

(39) a. Ella se bebe el vino
She refl drinks the wine
‘She drinks (all) the (whole) wine’

b. Ella bebe el vino
She drinks the wine

(40) a. El niño se comió una manzana
the child refl eats an apple
‘The child eats (all) the (whole) apple’

b. El niño comió una manzana
the child eats an apple

Furthermore, Nishida (1994: 428/431) argues that the aspectual features of the dative reflexive construction are linked to the fact that se overtly marks a particular class of situations that is quantitatively delimited. The ill formedness of the following dative reflexive constructions may be accounted for by the fact that both the bare plural ‘manzanas’ (apples) and ‘reconocer el error’ (recognize the error) in (41a) and (41b), respectively are not quantized entities as is the case in the examples in (39b)-(40b):

(41) a. *El niño se comió manzanas
the child refl eats apples

b. *Maria se reconocio el error
Maria refl recognized the error

Since the HD dative reflexive construction corresponds to the Spanish one with respect to aspectual properties, it does not come as a surprise that in HD the same restrictions apply: in HD the presence of objects that are not quantitatively delimited gives rise to an ungrammatical result:

(42) a. HD/SD  *Het kind eet zich appels
the child eats refl apples

b. HD/SD  *Zij kijkt zich televisie
She watches refl television

Conversely, in French dative reflexive constructions denoting consumption or other activities are very restricted and their occurrence is often lexicalized. Nevertheless, Leclère (1976) gives the following examples:

\[(43) \text{ a. Jean s’est mangé trois gâteaux} \]
\[\text{Jean refl has eaten three cakes} \]
\[\text{b. Paul s’est envoyé une fille} \]
\[\text{Paul refl has send away a girl} \]

Although Leclère does not discuss the aspectual properties of the constructions in (43), he demonstrates that they are excluded with verbs such as \textit{voir} (see) in (44) which belong to the aspectual category of states. We tentatively propose that the same restrictions as in HD and Spanish are true in French. We leave this suggestion for future research.

\[(44) \text{ *Paul se voit un document} \]
\[\text{Paulrefl sees a document} \]

In sum, we have demonstrated that, in analogy with the ergative reflexive construction \textit{se/zich} acts as an aspectual marker in another type of reflexive construction, namely the dative reflexive construction in HD, French and Spanish. The data clearly support our claim that in the reflexive construction the aspectual focus is on the end-point or the final state of the entity, or rather, the presence of \textit{se/zich} attributes to the state introduced by the event structure of the verb itself. We have supported the claim of Nishida that the aspectual features of the dative reflexive construction are linked to the fact that \textit{se/zich} overtly marks a particular class of situations that is quantitatively delimited. A quantitatively delimited situation emerged if (i) the object belongs to the category quantified entities and if (ii) the predicate expresses a delimited situation.

In the following section we are going to discuss in more detail how to account for the aspectual properties of \textit{zich/se} in syntax.

4. Motivation for structural configuration

4.1 Prefixes and particles

Similar to the use of \textit{zich} in HD, in SD a telic interpretation can be achieved by means of (i) particles and (ii) prefixes, as is illustrated in (45b) and (46b), respectively. (Note that they are also fully acceptable in HD). Unlike the (a)-sentences, the corresponding (b)-sentences express (i) always an affected object and (ii) a state of affairs that can only be interpreted as having an end-point:

\[(45) \text{ a. SD/HD Jan eet een appel} \]
\[\text{Jan eats an apple} \]
\[\text{b. SD/HD Jan eet een appel op} \]
\[\text{Jan eats an apple up} \]
It has been proposed that prefixes and particles such as be- and op are the heads of an (aspectual) small clause (Mulder 1992, Hoekstra et al. 1987):

\[
\begin{align*}
\text{a. } & \text{SD/HD Jan smeert een boterham} \\
& \text{Jan smears a sandwich} \\
\text{b. } & \text{SD/HD Jan besmeert een boterham} \\
& \text{Jan BEsmears a sandwich}
\end{align*}
\]

Since prefixes and particles affect the aspectual properties of the construction in the same way as zich/se in the ergative reflexive and dative reflexive constructions, an analysis that comes to mind is the structural configuration such as outlined in (48) in which zich/se is the head of an aspectual small clause:

\[
\begin{align*}
\text{a. } & \text{sc[ boterham be] smeer} \\
& \text{sandwich be smear} \\
\text{b. } & \text{sc[ een appel op] eet} \\
& \text{an apple up eat}
\end{align*}
\]

The structural configuration in (48), however, raises a lot of problems. We will discuss one particular problem in the next section and we will propose another analysis in which the data mentioned so far, will fit in.

4.2 Motivation for structural analysis

With respect to the analysis in which se/zich is the head of an aspectual small clause, one problematic question is the following\textsuperscript{xvi}. If in Dutch and in French zich/se is a small clause head comparable to be- and op, how come be- and op and zich, on the other hand, differ radically in that the former but not the latter cannot be combined with a resultative phrase specifying the end-point of the action, as is demonstrated in (49a) and (49b,c), respectively? Consider the following contrast in HD:

\[
\begin{align*}
\text{a. } & \text{besmeert de boterham kapot} \\
& \text{Jan BEsmears the sandwich broken} \\
\text{b. } & \text{Het riet buigt zich krom} \\
& \text{the reed bends refl crooked} \\
\text{c. } & \text{Jan eet zich een appel op} \\
& \text{Jan eats refl an apple up}
\end{align*}
\]
In French, a similar problem shows up, since the ergative reflexive construction can also be construed with prefixed (transitive) verbs such as *s’abêtir* (turn into a moron), *s’agrandir* (become bigger), *s’amaigrir* (become thinner) in which the prefix a- specifies the end-point of the action (Labelle 1990: 303).

Since *zich/se* combines with resultative adjectives whereas aspectual particles do not it is, in spite of the aspectual similarities, certainly not plausible that *zich* and *se* can also be analyzed as occupying the same aspectual head of a small clause. Clearly a more elaborated structure is needed.

Therefore, we tentatively like to propose the following structures in (50) in which the verb selects an AspPhrase as its complement. This ASP itself takes a small clause as its complement. The NP’s *la branche/het riet* occupy the subject position of this small clause. For the time being, we tentatively assume that the French *se* is the head of this AspP whereas the HD *zich* occupies the specifier position of this projection, as in (50a) and (50b), respectively (see Hulk&Cornips for a more extensive discussion of the different syntactic positions of *zich* and *se*). Our proposal that *sel/zich* occupy this (inner) AspP wants to account for the observation that *sel/zich* do not alter the Aktionsart of the verb but it contributes and specifies the already existing aspectual structure of the verb.
In future research we like to link the different structural positions of *se* and *zich* in (50) to the following contrasts between HD and French. Let us first turn to HD. In HD the ergative reflexive can be construed independent of tense and resultative modifiers such as PP’s, adjectives or particles:

(51) HD/*?SD Het riet buigt *zich* (krom)
      the reed bends refl crooked

In French, however, both Labelle and Zribi-Hertz have clearly demonstrated that some verbs only allow the ergative reflexive construction if the ‘passé composé’ tense is used which loosely speaking asserts the end-point of the process (cf. (52a)) or if a PP is added that specifies a final state (cf. (53a)). It is striking that the corresponding (b)-constructions reject the ergative reflexive. These data clearly suggest that in some cases the possibility of
construing the ergative reflexive construction in French has to be triggered by other resultative modifiers:

(52) a. Son état s'est empiré
    ‘his/her state of health has become worse’
b. *Son état s'empire
    ‘his/her state of health is worsening’

(53) a. La cire se coule dans le moule
    the wax refl flows in the mold
b. *La cire se coule
    the wax refl flows

Secondly, another difference between the HD and the French ergative reflexive constructions concerns the auxiliary selection as is demonstrated in (54). The HD ergative reflexive selects the auxiliary hebben (have) whereas the French ergative reflexive selects the auxiliary être (be). Note that apart from a very few exceptions, almost all verbs with zich select obligatory hebben both in SD and HD (Everaert 1986). Here, we like to suggest that this difference may be due to the different positions of zich and se in the AspPhrase but we leave this suggestion for future research (see den Dikken (1995) for an interesting suggestion about the interaction of se and AspP with respect to auxiliary selection).

(54) a. HD/*SD Het riet heeft zich gebogen
    the reed has refl bent
b. La branche s’est cassée
    the reed refl is bent

5. Conclusion

In the first part of this article we have shown that the HD reflexive construction is, just as its French reflexive equivalent, in fact an ergative construction in which the surface subject is the subject of a small clause that occupies the internal argument position of the verb. The ergative status of the reflexive constructions can be demonstrated by the following diagnostics: (i) they allow their past participle to predicate over their surface subject, (ii) they do not allow impersonal passives and (iii) in HD they cannot be embedded under the causative laten. Moreover, they also have the semantic properties of ergative predicates: their surface subjects must possess the semantic features necessary to undergo the action of the predicate. They differ from other ergative predicates such as passives in that they are related to transitive verbs that take a Causer and not a (human) Agent as external argument. Also we have demonstrated that sel/zich in the ergative reflexive construction is not an argument.

In the second and third section, we extensively discussed the aspectual properties of both the HD and the French ergative reflexive and dative reflexive constructions, respectively. We have shown that these types of constructions have a specific aspectual interpretation: they focus on the final state of the entity undergoing the change, or rather, in the ergative and dative reflexive construction sel/zich does not alter the Aktionsart of the
verb but it contributes and specifies the already existing aspectual structure of the verb. If accomplishments can be considered as consisting of an activity and a state, the ergative reflexive focusses on the state-part of the event, whereas the corresponding intransitive (without the reflexive) focusses on the activity-part of the event. Consequently, in the ergative reflexive sel/zich establishes a relation between an entity and a (sub)event, whereas in transitive reflexive constructions sel/zich relates two entities or argument positions.

We have argued that the aspected properties of sel/zich can be accounted for by assuming that a functional projection AspP is selected by the verb. This functional projection itself takes a small clause as its complement. The NP’s het riet/la branche occupy the subject position. Moreover, we have tentatively assumed that se is the head of this projection whereas zich is in the specifier position.
References


Notes

* We would like to thank Anne-Maria Di Sciullo, Martin Everaert, Teun Hoekstra and two anonymous reviewers for their comments on an earlier version of this article. All errors remain ours.

---

i Heerlen Dutch is the result of a process of language shift with the dialect as the source and Standard Dutch as the target language (cf. Cornips 1994).

ii Note for completeness that in French transitive change of state verbs give rise to two other types of counterparts, namely only a reflexive as in (i) and only an intransitive as in (ii). In this article we will focus on the change of state verbs that occur in both constructions.

(i) a. *Le vase brise
   the vase breaks/is breaking
   b. Le vase \textit{se} brise
      the vase breaks/is breaking

(ii) a. \textit{La neige fond}
      the snow melts/is melting
   b. *La neige \textit{se} fond
      the snow melts/is melting

iii It must be noted that the ungrammaticality of (7b) is not affected by the fact that the surface subject \textit{het riet} (the reed) is inanimate since the element \textit{zelf} does not carry the feature <+animate>. This is demonstrated both by the PP \textit{uit zichzelf} in (ia) and by the SD/HD reflexive construction with an inanimate surface subject in (ib):

(i) a. HD/SD \textit{Het riet buigt uit \textit{zichzelf}}
      the reed bends by itself
   b. HD/SD \textit{Het probleem heeft \textit{zichzelf} opgelost}
      the problem has itself solved

iv Note that the French the causative verb \textit{faire} (let) differs from the Dutch causative \textit{laten} in that it does not necessarily take a regular transitive reflexive construction as its complement. This was pointed out to us by an anonymous reviewer (cf. Zribi-Hertz 1987)

(i) \textit{La secousse a fait \textit{se} desceller le piton}
   'the tremor has made the hook fall'

v Note that this ungrammaticality is in contrast with passive constructions in which the (agentive) external argument is implicitly present (cf. Keyser & Roeper 1984: 407).

vi In French unergative intransitive verbs that can be combined with cognate objects only allow impersonal passivization. This distinction is not important here, however, since the verbs in question can clearly be combined with objects in their transitive use.

(i) a. Il a \textit{été} \textit{dansé}
   there has been danced
   b. *Il a \textit{été} \textit{brillé}
      there has been shined

vii The construction in (16a) must not be confounded with the grammatical construction in (i) which is not a passive construction, but an active impersonal sentence in the past present tense. The fact that \textit{se casser} can appear in such an active impersonal construction also supports the ergativity hypothesis, although in French unergative verbs may also occur in this construction under certain conditions (see Hulk 1989).

(i) Il \textit{s est cassé \textit{un verre}}
   there refl is broken a glass

viii As can be seen in (i), (16b) has a grammatical equivalent in German (Abraham 1986:7):

(i) \textit{Heute wird sich einmal anständig gewaschen}
   today becomesrefl once properly washed
   'There will have to be a good wash-up today' (imperative)

ix A third test for ergativity is auxiliary selection. See later section 4.2.
We assume that the semantics of the by-phrase impose an agentive interpretation on the implicit external argument which is incompatible with the causative external argument of the ergative reflexive constructions. The exact way in which this may be done has to be made precise in future research.

Zubizarreta (1987) also argues in favour of the non-argumental status of the French se in what she calls anti-causative constructions. Since se is an A*-binder with a defective content she analyzes it as a verbal operator. According to Zubizarreta this clitic se is inserted in the lexicon and serves as an ‘L-externalizer’ of the intern argument-variable.

With respect to temporal aspect, it must be noted that several linguists adopt a more abstract theory of Aspect in which they include also spatial and scalar properties of events.

That was in fact also the main point of Lagae’s (1990) criticism of Zribi-Hertz who seemed to suggest that such a complementary distribution did exist.

Moreover, Labelle shows that in the case of the intransitive construction the process is presented as taking place autonomously. The entity in subject position must have the property to bring about the change. According to her, the entity itself may be linguistically attributed responsibility for the change and it may be realized as an external argument.

Note that zich in the dative reflexive construction is not an internal argument since it can not be construed with the element self (self) in HD (cf. 2.1):

(i) HD/SD *Zij drinkt zichzelf een bier
    She drinks herself a beer

These problems have been pointed out to us by two anonymous reviewers. One of them is the following which we leave for future research. If se is a kind of particle in French why are other particle constructions impossible in French?:

(i) *Jean mange une pomme “up”
    Jean eats an apple RES. PART

Secondly, why are some resultative constructions impossible and some others possible in French, as in (iia) and (iib) respectively?:

(ii) a. *La branche (se) casse “crooked”
    the reed refl bends RES. ADJ.

b. La branche (se) casse en deux
    the reed refl bends RES. ADJ.

As opposed to an outer AspPhrase which has also been proposed in literature (cf. Hulk & Cornips 1994).

We assume a similar structure for the dative reflexive construction.