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Affected objects

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0. Introduction

In this article we will examine a well known, but badly understood constraint on objects in generative grammar: the so-called Affectedness constraint. This constraint states that only "affected" objects are preposable. Apparently, the syntactic property of preposability versus non-preposability of the object NP appears to correlate with an independent semantic distinction.

One of the syntactic constructions where this constraint is claimed to play a role, is the middle construction, as illustrated in (1)

(1) This apple eats well

The common assumption about middle formation is that it is only acceptable if the promoted argument (the logical object) is "affected" (cf. Jaeggli 1986, Tenny 1987, Roberts 1987, Hoekstra & Roberts 1993, Fagan 1992). It is intriguing, however, that the constraint of affectedness does not seem to hold if the middle construction show up with with a reflexive, as is the case in Romance languages. Our aim in this paper is to reconsider the notion of affected object in relation to its role in the middle construction. The contrast between languages which have "plain" middles with those which have "reflexive" middles will be crucial in this respect. To this end we will not only discuss Romance reflexive middles, but we will also examine middles in a regional Dutch variety that is spoken in the southeast of the Netherlands, namely Heerlen Dutch (HD).¹ Interestingly, Heerlen Dutch (HD) differs from Standard Dutch in that in the former a reflexive middle arises whereas in the latter the presence of the reflexive is disallowed, as is exemplified in (2) (see also (1)):

(2) a HD/*SD Dit hemd wast *zich* goed
 this shirt washes refl well

¹ Heerlen Dutch is the result of a process of language shift with the local dialect as the source and Standard Dutch as the target language. Heerlen Dutch differs from Standard Dutch in that reflexives occur in a much wider range of constructions than Standard Dutch for instance in impersonal passives, ergative and double object constructions (The Heerlen Dutch examples in this paper are based on corpus data or on informant data (see Cornips 1994). Further, the co-author Cornips is a native speaker of Heerlen Dutch).

b HD/*SD	Dit	boek	leest	<i>zich</i>	gemakkelijk
	this	book	reads	refl	easily
c HD/*SD	Deze	appel	eet	<i>zich</i>	lekker
	this	apple	eats	refl	well

An examination of the properties of plain and reflexive middles in various kinds of languages will be shown to yield new insights into the phenomenon of the affected object. We will show that only if we examine the notion of ‘affectedness’ as an aspectual compositional phenomenon, can we adequately account for all the middles we will encounter.

This paper is organized as follows. In the first part, we will discuss the notion of affected object as presented in the literature. In the second part we will show that this notion raises problems with respect to both reflexive and plain middles. Therefore, in the last part we will present a possible analysis of the phenomenon of affected object. This analysis accounts for the differences between languages in which plain as well as reflexive middles show up.

1. The notion affected object

Originally, in the late seventies, the notion of affected object was formulated in order to account for the puzzling facts that passive nominals either allow or disallow NP-movement, as is illustrated in (3) and (4), respectively (see Fiengo 1980 and references cited there). Since these examples are structurally identical, a semantic account has been given in the literature to explain their differences in acceptability. It is noted that the objects in (3) are changed by the action of the verb, namely the action of ‘*destroying*’ and ‘*executing*’, respectively, whereas the objects in (4) are not altered by the action of their verbs. Apparently, NP-movement leads only to a grammatical result if the object is affected (the examples are taken from Fiengo):

- (3) a Rome’s destruction by the barbarians
b the prisoner’s execution by the authorities
- (4) a *great relief’s expression by John
b *some money’s gift to the library by John

What is more, Jaeggli (1986: 608) argues that the notion of affectedness should be related to the thematic interpretation of the arguments of the verb. He argues that only in the case of an affected object is its thematic interpretation well defined since this kind of object will always be the ‘result’ or ‘outcome’ of the action of the predicate. In the case of an unaffected object, however, Jaeggli claims that the thematic interpretation of the object depends on the thematic interpretation of the subject. In Jaeggli (1986: 607) this thematic relation is linked to the lack of NP-movement in passive nominals, such as (6), by means of the following definition of the Affectedness Constraint: “*If a complement of X is unaffected, it is impossible to eliminate the external theta-role of X*”.

Now, let us see the significance of the notion affected object with respect to middle formation. It is clear that the examples in (5) through (8) precisely replicate the conditions of passive nominals: that is not all transitive predicates are able to undergo plain middle formation whereas they allow middle formation if the logical object is an affected object, as shown in (5,6) and (7,8), respectively. From this, it is argued that in middles the notion of affected object is of crucial importance too (the examples are taken from Roberts 1987, Hoekstra & Roberts 1993, Fagan 1992 e.l.):

(5) a Eng *The mountains see easily
b SD *De bergen zien gemakkelijk

(6) a Eng *These problems consider easily
b SD *Deze problemen beschouwen gemakkelijk

(7) a Eng This apple eats easily
b SD Deze appel eet gemakkelijk

(8) a Eng This house paints easily
b SD Dit huis verft gemakkelijk

In more recent literature, several definitions of the notion affected object arise which are by and large nearly identical. For example, Fellbaum and Zribi-Hertz (1989) claim that an argument of a verb is affected if it exists prior to the action or process referred to by the verb and if its inherent properties are modified by that action or process. Similarly, Roberts (1987) claims that an affected object equates a theme argument which undergoes a change of state. For the time being, this description of the notions affectedness or affected object is fairly satisfactory.

2. Affected object: a sufficient condition on middle formation?

Thus far, we have discussed that only transitive verbs selecting affected objects are able to undergo middle formation: that is, an object is affected if it is somehow altered or modified by or if it undergoes the action expressed by the verb. However, we will show that the occurrence of an affected object is not a sufficient condition for a predicate to undergo middle formation.

2.1 Affected object: differences between plain and reflexive middles

It is clear that in the regular transitive in (9) the object *the Eiffel Tower* is not affected/modified/alterd by the *seeing*-event (cf. Fagan 1992):

(9) a Eng I see the Eiffel Tower
b SD Ik zie de Eiffeltoren

As we would expect, middle formation will lead to an ungrammatical result, as shown in (10):

(10) a Eng *The Eiffel Tower sees easily
b SD *De Eiffeltoren ziet gemakkelijk

But, in contrast to these plain middles, the reflexive middle in French in (11) is fully acceptable:

(11) Fr La Tour Eiffel se voit facilement de ma fenêtre
the Eiffel Tower refl sees easily from my window

Now consider also the contrasts in acceptability between the plain and reflexive middles in (12) through (15). These contrasts reveal that all the transitive verbs that select unaffected

objects in the corresponding regular active constructions (as exemplified in (9)) can undergo middle formation if the middle combines with the reflexive *se* (the examples are taken from Fellbaum & Zribi-Hertz 1989, Jaeggli 1986, Fagan 1992, Cinque 1988, Authier & Reed 1994):

- (12) a Eng *These mistakes don't *admit* easily
 b SD *Zulke vergissingen *staan* niet gemakkelijk *toe*
 c Fr Cela ne s' *admet* pas facilement
 that refl admits not easily
- (13) a Eng *This *forgets* easily
 b SD *Dat *vergeet* gemakkelijk
 c Fr Les anniversaires, ça s' *oublie* facilement
 birthdays that refl forget easily
- (14) a Eng *French *learns* easily
 a' Eng *French *acquires* easily
 b SD *Frans *leert* gemakkelijk
 b' SD *Frans *verwerft* gemakkelijk
 c Fr Le français s' *acquiert* facilement
 French refl acquires easily
- (15) a Eng *That *says* easily
 b SD *Dat *zegt* gemakkelijk
 c Fr Ça *se dit* partout
 that refl says everywhere

So, we will have to explain why the affectedness constraint does not also make the reflexive middles unacceptable, as is the case with plain middles.

2.2 Affectedness in the case of the reflexive?

From the above, it seems at first sight that the constraint of affected object has an effect only in the case of plain middle formation. Now, the question that arises is the following. Why do transitive verbs that take unaffected objects form acceptable middles if construed with a reflexive? One way to go about addressing this question is to assume that it is indeed the presence of a reflexive marker which is possible for the fact that the affectedness constraint does not hold.

Cinque's (1988:563) treatment is in this spirit since he seems to suggest that the affectedness constraint is inoperative in reflexive middles. According to him the Italian middle "is possible with verbs taking non-affected themes objects, which disallow the middle construction in English". He gives the counterparts of (11) and (14) in Italian (the examples are taken from Cinque):

- (16) a It La luce gallia ha il vantaggio di vedersi bene anche nelle neblia più fitta
 'Yellow lights have the advantage of *si* seeing even in the thickest fog'
 b It Cette langue hanno la proprietà di impararsi con più facilità di altri
 'Certain languages have the property of *si* acquiring more easily than others'

Furthermore, Cinque (1988:564) takes the constraint of affected object to be a condition on the lexical process. Since he assumes that in Italian middle formation is syntactic, he predicts that the affectedness constraint does not play a role in Italian middles. However, we have found two pieces of counterevidence for such an assumption. First, if it is indeed the case that the middle formation with a reflexive does not involve any kind of 'affected object' constraint, we would expect that all kinds of transitive predicates taking unaffected objects form acceptable middles. As can be seen from (17c,d), this expectation is not borne out (cf. Tenny 1987, Roberts 1987):

stative verbs:

- (17) a Eng *This answer knows easily
 b SD *Deze vraag weet gemakkelijk
 c HD *Deze vraag weet *zich* gemakkelijk
 d Fr *Cette question *se* sait facilement

In addition, if the reflexive middles in the 'Roman' or 'German' languages are indeed comparable we would expect the Heerlen Dutch middles to show the properties of the Romance reflexive middles as well, i.e. we would expect that middle formation with verbs that take unaffected objects will lead to a grammatical result. Interestingly, in contrast to Standard Dutch, in Heerlen Dutch middles combine with the reflexive *zich* (cf. Hulk & Cornips 1996). At first sight, it appears that this expectation is borne out in the case of the transitive verbs *vergeten* 'forget', *leren* 'learn', *verwerven* 'acquire' and *zeggen* (see also (12) through (15)):

- (18) a HD Dat vergeet *zich* gemakkelijk
 that forgets refl easily
 b HD Zo'n dingen *staan zich* niet gemakkelijk *toe*
 suchthings admit refl not easily
 c HD Frans *leert zich* gemakkelijk
 French learns refl easily
 d HD Frans *verwerft zich* gemakkelijk
 French acquires refl easily
 e HD Dat zegt *zich* gemakkelijk
 that says refl easily

However, the following middles present a second piece of evidence against the assumption that in the case of a reflexive marker the affectedness constraint does not hold since in Heerlen Dutch perception and non-stative psych verbs such as *zien* 'see' and *haten* 'hate' in (19a) and (20a), respectively, cannot undergo middle formation, in contrast to the French counterparts:

- (19) a HD *De Eiffeltoren ziet *zich* gemakkelijk
 the Eiffel Tower sees refl easily
 b Fr La Tour Eifel *se* voit facilement de ma fenêtre (cf (11))
 the Eiffel Tower refl sees easily from my window

(20) a HD *Dit boek haat zich
this book hates refl
d Fr Les impérialistes, ça se déteste
Imperialists that refl detests

What is important, here, is that it is obvious that languages in which reflexive middles show up may differ with respect to the affectedness constraint. From this, we may safely conclude that the notion affected object needs more refinement.

2.3 Affectedness in the case of plain middles?

Let us now examine plain middles in more detail. It is intriguing that Fagan (1992:65) has already noted that the common definitions of an affected object in which ‘affected’ is interpreted as “changed, moved, altered in status or created” do not adequately account for all the facts with respect to plain middles. According to her, in the regular transitive in (21) the grammatical object *this book/dit boek/ce livre* is not an affected argument, that is to say, the inherent properties of a ‘book’ are not changed in any way by the activity of ‘reading’:

- (21) a Eng Mary reads this book
b SD Marie leest ditboek

A diagnostic for affectedness, namely the so-called the *do to* test, confirms Fagan’s observation. From (22), it is clear that the predicate *read a book* does not pass this test (cf. Jackendoff 1996:312; Fiengo 1980):

- (22) *What Bill did to the book was read it

Yet, it forms an acceptable middle, as can be seen in (23). Strikingly, middle formation without a reflexive is possible although the logical object is not an ‘affected’ object:

- (23) a Eng This book reads well
b SD Dit boek leest goed
c HD Dit boek leestzich goed
d Fr Ce livre se lit bien

Thus, even if the reflexive is absent, middle formation may take place when the logical object is not altered or modified from a semantic point of view. Apparently, as is the case with the reflexive middles, the notion of affectedness cannot adequately account for all the facts with respect to plain middles.

3. ‘Affectedness’ is not a primitive notion

Until now, we have shown that the notion of affectedness is a problematic one. Returning to the problem at hand, we have the following puzzling facts to account for:

- (i) in ‘reflexive’ languages some predicates with unaffected objects may undergo middle formation in contrast to ‘plain’ languages (cf 2.1));
- (ii) ‘reflexive’ languages may differ among themselves with respect to middle formation in the case of unaffected objects (cf. 2.2.)) and
- (iii) in ‘plain’ languages, some predicates with unaffected objects may undergo middle formation whereas others may not (cf. 1 & 2.3)).

One way to handle these facts is to re-examine very carefully the notions of affected object or affectedness. Although this notion is to a certain extent intuitively clear, the precise way

to implement this idea has often been left rather vague. What does it mean to say that an object is affected? And what properties does it have?

3.1 Lexical aspectual properties of the predicate

We will argue that the notion affected object or affectedness is an essential element in the larger question about aspectual properties of verbs and predicates. Recall that we have discussed a class of verbs that disallow middle formation regardless of the presence of a reflexive, namely stative verbs such as *know* (Jaeggli 1986, Tenny 1987, Roberts 1987, Hoekstra & Roberts 1993, Fagan 1992), (cf. (19)). It is a common observation in the literature that stative verbs differ from 'eventive' verbs in that the former lack implications of a passage of time (cf. Jackendoff 1996: 321). This gives us a first clue as to which lexical aspectual property of a verb is a necessary one with respect to middle formation: it is the property of a verb to express an event type that evolves along a certain temporal scale.

With respect to 'eventive' verbs, in Roberts' (1987) it is argued that verbs taking affected objects belong to the aspectual class of accomplishments, whereas in Fagan (1992:100) it is claimed that verbs only belonging to activities or accomplishments may undergo middle formation. Note that activities and accomplishments are related to the alternative notions that describe the different event types expressed by the verb/predicate, namely notions such as atelicity, non-delimitedness, unboundedness, process and telicity, temporally delimitedness, boundedness, respectively (Jackendoff 1996: 306).

Before we start to examine these notions, it must be noted that the standard test for activity or atelicity and accomplishment or telicity of a verb is its behavior with temporal adverbials (cf. Jackendoff 1996: 306). Activities differ from accomplishments in that the former easily combine with temporal adverbials expressing duration, whereas the latter easily combine with temporal adverbials expressing a specific point in time, as is illustrated in (24) and (25), respectively:

- (24) a SD/HD Hij slaat de hond *in een uur/een uur lang
He hits the dog within an hour/for an hour
b HD/SD Ik kijk televisie *in een uur /een uur lang
I watch television within an hour/for an hour

- (25) a SD/HD Ik eet deze appel *een uur lang/in een uur op
I eat this apple for an hour/within an hour up
b SD/HD Ik schilder dit portret *een uur lang/in een uur
I paint this portrait for an hour/in an hour

However, in contrast to the claims of Roberts and Fagan the following ungrammatical examples - with and without the reflexive - show that neither activities nor accomplishments are directly connected with middle formation, as is illustrated in (26-27) and (28-29), respectively:

- (26) a SD ?*Dezehond slaat gemakkelijk
b HD ?*Dezehond slaat*zich* gemakkelijk
c Eng *This glass hits easily (cf. Roberts 1987:215)
this dog/glass hits refl easily

- (27) a SD ?*Televisie kijkt gemakkelijk
 b HD ?*Televisie kijkt *zich* gemakkelijk
 c Fr *Cette télévision se regarde facilement (this) television refl watches
- (28) a SD *Deze appel eet gemakkelijk **op**
 b HD *Deze appel eet *zich* gemakkelijk **op**
 this apple eats refl easily up
- (29) a SD *Dit portret schildert prettig
 b HD *Dit portret schildert *zich* prettig
 this portrait paints refl easily

3.2 The event-type of the predicate

We would like to claim that Roberts and Fagan are partly correct in perceiving an important link between affectedness and the eventive properties of the verb. But we will argue that the affectedness is not solely linked to the verb but is instead crucially linked to the aspectual properties of the predicate as a whole, that is to say, it is related to the event structure of the entire sentence. To illustrate this claim, consider the following contrast:

- (30) a HD *Dit portret schildert *zich* prettig
 this portrait paints refl easily
 b HD Dit plafond schildert *zich* prettig
 this ceiling paints refl easily

The middle in (30a) differs from (30b) in that the verb *schilderen* ‘paint’ in the latter combines with a different kind of object, namely *plafond* ‘ceiling’ instead of *portret* ‘portrait’, respectively. Apparently, this minimal contrast indicates that only the object in (30b) is an affected object by which middle formation is allowed. Our task here will be to gain a deeper understanding of the interaction between the aspectual properties of the predicate and affected object. In doing so, let us again concentrate on the minimal contrast as presented above. Interestingly, the corresponding regular transitives of the middles in (30), repeated here for convenience as (31a) and (31b), differ aspectually: the former only depicts the event as telic (bounded, accomplishment), whereas the latter allows both an atelic and telic event reading since it combines with temporal adverbials expressing duration and with temporal adverbials expressing a specific point in time, too:

- (31) a SD/HD Ik schilder dit portret in een uur/*een uur lang
 I paint this portrait in an hour/for an hour
 b SD/HD Ik schilder dit plafond in een uur/een uur lang
 I paint this ceiling in an hour/for an hour

From this, it is clear that middle formation is crucially linked to the aspectual properties of the predicate. From the contrast in (30) we may assume that (i) middle formation is connected with the whole predicate or the event structure of the entire sentence and (ii) only predicates which depict the event as atelic and telic may undergo middle formation.

Let us examine some more minimal contrasts between predicates that only depict the event as telic or, on the other hand, predicates that express a specific event-type, namely an atelic and telic event reading, as is exemplified in (32) and (33), respectively. (32) indicates that in Dutch prefixes such as *be-* add a telic aspect to the verb they attach to (van Hout 1996: 179; see also the particle *op* in (28)). As a consequence, only a telic event (or accomplishment) emerges since a temporal adverbial expressing duration leads to an ungrammatical result:

- (32) a HD/SD Ik **bespuit**deze auto in een uur/*een uur lang
 I BE-spray this car in an hour/for an hour
 b HD/SD Ik **besmeer** deze boterham in een uur/*een uur lang
 I BE-smear this sandwich in an hour/for an hour

(33), however, shows that the same predicates without the prefix allow both an atelic and telic event reading:

- (33) a HD/SD Ik spuit deze auto in een uur/een uur lang
 I spray this car in an hour/for an hour
 b HD/SD Ik smeer deze boterham in een seconde/een seconde lang
 I smear this sandwich in a second/for a second

As we would expect from the assumption discussed above, it is not surprising that the predicates that only yield a telic event, disallow middle formation:

- (34) a HD *Deze auto **bespuit***zich* gemakkelijk
 b SD *Deze auto **bespuit** gemakkelijk
 this car BE-sprays refl easily
 (35) a HD *Deze boterham **besmeert** *zich* gemakkelijk
 b SD *Deze boterham **besmeert** gemakkelijk
 this sandwich BE-smears refl easily

Clearly, our assumption is supported again by the facts that the predicates which display an atelic-telic event type allow for middle formation:

- (36) a HD Deze auto spuit *zich* gemakkelijk
 b SD Deze auto spuit gemakkelijk
 this car sprays refl easily
 (37) a HD Deze boterham smeert *zich* gemakkelijk
 b SD Deze boterham smeert gemakkelijk
 this sandwich smears refl easily

So, let us now try to understand the puzzling fact that in 'plain' languages some predicates with unaffected objects may undergo middle formation whereas others may not. In particular, a plain middle based on the verb *read* is a problematic one if the notion of

affected object is solely treated from a semantic point of view such that the object *this book* has to be altered or modified by the action expressed by the verb (cf. (23)):

- (38) a Eng This book reads well
 b SD Dit boek leest goed
 c HD Dit boek leestzich goed
 d Fr Ce livre se lit bien

As we would expect according to our assumption, namely that middle formation is possible if the predicate allows an atelic and telic event reading, it is not surprising anymore that the predicate *read a book* allows both kinds of adverbial phrases expressing duration and a specific point in time:

- (39) a SD/HD Ik lees ditboek urenlang/ in een uur
 b Eng I read this book for hours/ in one hour

Now, the contrast between plain middles no longer holds with respect to the notion of affected object. Hence, with respect to the event structure of the entire sentence, (39) does not differ from the regular actives in (40) since both sentences combine with the two kinds of temporal expressions:

- (40) a SD/HD Hij wast zijn hemd in een uur/een uur lang
 hewashes his shirt within an hour/for an hour
 b SD/HD Hij eet dezeappel in een minuut/een minuut lang
 heats this apple within a minute/for a minute

We want to claim that it is this aspectual property of the predicate, namely expressing such temporal scale or measuring out the event without the aid of external phrases that is a necessary condition for middle formation. What is more, in view of this claim, an affected object is an object that measures out the event: it is quantitatively delimited.

4. The syntactic role of the reflexives

We are now ready to discuss the dissimilarities between plain and reflexive middles: why, for example, are perception verbs excluded as plain middles while they are allowed as reflexive middles? In order to answer this question, we like to propose that these dissimilarities are due to the fact that in middles the presence of the reflexive is of crucial importance in connection with the compositional aspectual properties of the predicate (cf. Hulk & Cornips 1996). To be more precise, we want to claim that if the lexical aspectual properties of the verb/predicate do not yield a temporal scale such that every sequence of a subevent denotes a different point on a time-axis or if they do not inherently involve an end-point, the presence of the reflexive has the effect of "forcing" the verb into expressing a

path and/or a transition (beyond the level of the lexicon). As a result, the verb/predicate will display those aspectual properties by which middle formation becomes acceptable.²

In order to illustrate very briefly the forcing-capacities of the reflexive towards the event type of the entire sentence, consider the following regular transitives in Heerlen/Standard Dutch:

- (41) a SD/HD Zij eet een appel een minuut lang/in een minuut
 b *SD/HD Zij eet zich een appel *een minuut lang/in een minuut
 She eats refl anapple for one minute/in one minute

First, in (41) as we have mentioned earlier, the verb *eten* 'eat' has the capacity to measure out the event by which the spatial extent or volume of the object *een apple* 'an apple' is the property that measures the event. Second, Heerlen Dutch differs from Standard Dutch in that the reflexive *zich* may appear, as shown in (41b). Finally, (41b) demonstrates that the reflexive influences the event structure of the entire sentence since the presence of a temporal adverbial expressing duration leads to an ungrammatical result (see also Cornips & Hulk 1996). From this, in Cornips & Hulk (1996), it is argued extensively that the occurrence of *zich*, however, does not alter the lexical properties of the verb or predicate nor does it modify parts of the already existing (sub) events but the function of the reflexive is to bring about an aspectual focus. Others have also argued that reflexive markers can play an aspectual role in a variety of languages (cf. Zagana 1994, Almagro 1993, Nishida 1994).

However, if the predicate does not yield a proper event structure, the presence of the reflexive will be disallowed, and consequently, middle formation will be excluded too. To illustrate this, let us examine in Spanish the perception verbs such as *see* and *watch*, which combine with the reflexive *se*. Again, the constructions without *se* differ from the constructions with *se* in that only in the latter a reading emerges in which the event gets more completed (cf. Almagro 1993:149). To this end, compare the a- and b- examples in (42) and (43) (the examples are taken from Almagro 1993):

- (42) a SP Mira las fotos
 looks at the photos
 '(He) looks at the photos'

² Note that it is important to keep apart the two factors involved in the aspectual 'makeup' of middle constructions. The first is the affectedness constraint such as we have studied it here. This is a condition which tells us which verbal predicates can undergo middle formation; it does not tell us anything about the outcome of such a formation. The notion affectedness has to do with what has been called *Aktionsart*: it expresses (inherent) aspectual properties of a verb. *Se/zich* has a role to play with respect to this type of aspectual impact of the affectedness constraint. The second aspectual factor involved in middles is the event type of the entire construction *after* middle formation has taken place. As is well known, in most languages middles denote states. The operation of middle formation somehow abstracts over the kind of event denoted by the verb in its active voice and turns it into a state. *Zich/se* has no role to play in this operation.

b SP *Se miralas fotos*
refl looks at the photos
'(He) looks at (all) the photos'

- (43) a SP *María verá el programa*
'Mary will watch the program'
b SP *María se verá el programa*
'Mary will watch the (entire) program'

In Heerlen Dutch, however, perception verbs such as *zien* 'see', may not combine with the reflexive *zich*. We claim that this is due to the fact that the verb *zien* 'see' is, in contrast with Spanish, not a dynamic verb:

- (44) a HD **Hij ziet zich defoto's*
he sees refl the photos
b HD **Hij ziet zich destad/de Eiffeltoren*
he sees refl the town/the Eiffel Tower

The contrast between Spanish and Heerlen Dutch in (42-43) and (44) respectively "demonstrate that verbs that are considered translation equivalents in two languages can differ in subtle ways" (Levin & Rappaport 1995:159-160). Levin & Rappaport demonstrate that one and the same verb may differ aspectually in various languages. In English, the verb *blush* can be conceptualized as either a state or a change of state. In Italian, the verb *arrossire* 'blush' actually describes a change of state and acts like a telic verb, whereas in Dutch the verb *blozen* 'blush' is treated as 'be in a state' verb, as is illustrated in (45a) and (45b), respectively:

- (45) a It G è arrossito *per 10 minuti/in un secondo
 G is blushed for 10 minutes/in one second
 b SD J heeft gebloed een uur lang/*binnen een uur
 J has blushed for an hour/in an hour

Therefore, since languages may differ in subtle ways as far as the aspectual characteristics of equivalent verbs are concerned, it is not surprising that reflexive languages may differ among themselves with respect to middle formation and the difference between (19a) and (19b), repeated here as (46a) and (46b) is no longer problematic:

- (46) a HD *De Eiffeltoren ziet *zich* gemakkelijk
 the Eiffel Tower sees refl easily
 b Fr La Tour Eiffel *se* voit facilement de ma fenêtre (cf (11))
 the Eiffel Tower refl sees easily from my window

5. Concluding remarks

In this paper we have discussed the well known notion of affected object. We took the following definition as our starting point: an affected object is an object that is somehow altered or modified by the action expressed by the verb. We have shown that this definition is a problematic one with respect to middle formation, where affectedness is claimed to play an important role. We have discussed the following puzzling facts: (i) in ‘plain’ languages, some predicates with unaffected objects may undergo middle formation whereas others may not, (ii) in ‘reflexive’ languages some predicates with unaffected objects may undergo middle formation whereas others may not and (iii) ‘reflexive’ languages may differ among themselves with respect to middle formation in the case of unaffected objects.

In view of these questions, we have argued that the notion of affected object has to be re-defined in aspectual terms: an object is affected if it measures out the event, or if it is quantitatively delimited. An affected object goes hand-in-hand with a predicate that displays an event type that is a dynamic one, that evolves along a certain temporal scale such that successive and continuous stages of the event are involved (see also Jackendoff 1996). Moreover, we have shown that in middles the presence of a reflexive is of crucial importance in connection with the compositional aspectual properties of the predicate. To be more precise, we have claimed that the reflexive may have the effect of "forcing" the verb into expressing a path and/or a transition (beyond the level of the lexicon). As a result, the verb/predicate will display those aspectual properties by which middle formation becomes acceptable. Finally, we have very briefly shown that in other constructions too the reflexive may play an aspectual role. Consequently, if we redefine the affectedness constraint in middle constructions as a more general condition on aspectual properties of the predicate, the difference between plain and reflexive middles is no longer problematic.

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