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# What makes you move? A minimalist study of object displacement in English Double Object Construction 

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#### Abstract

The aim of this paper is to analyse the displacement phenomena the direct and indirect objects in the English Double Object Construction (DOC) can undergo. The focus is on the movement out of the DOC to the sentence initial position. The analysis concerns not only globally acceptable Goal-Theme object sequence but also the Theme-Goal DOC, which grammaticality is restricted only to a few British English dialects. The processes affecting the objects in the Prepositional Construction are also mentioned. The initial part of the paper is devoted to the underlying syntactic representations of the DOC in English. Following, e.g. Citko (2011), Cuervo (2003), Pylkkännen (2002, 2008), a representation with the Low Applicative Phrase has been adopted. The exact case valuation mechanism for relevant objects (as proposed by Bondaruk and Bartczak-Meszyńska (2014)) has been established. The remaining part of this paper contains a detailed discussion of the derivation of particular object initial sentences with the DOC in the active and in the passive and the interplay between passivisation and topicalisation, as the triggers of the object fronting.


Keywords: Double Object Construction, passivisation, topicalisation, the Minimalist Program, the Low Applicative Phrase

## 1. Introduction

The aim of this paper is to analyse object displacement phenomena affecting Direct (DO) and Indirect objects (IO) in the Double Object Construction (DOC) in English. We concentrate on the triggers and nature of movement either object can undergo from within the DOC to the sentence initial position. Subject to this study are not only cases where both objects are realised by nominal expressions, such as DPs or pronouns but also instances of Prepositional Construction (PC), where a PP functions as one of the objects, both in the active and the passive. This analysis is carried out in the framework of the Minimalist Program proposed by Chomsky (2000, 2001, 2007, 2008). Our investigation utilizes the syntactic representations of English DOC with the Applicative Phrase, as proposed by e.g. Pylkkännen (2008) for Greek and employs a case valuation mechanism put forward by Bartczak-Meszyńska (2013) and Bondaruk and Bartczak-Meszyńska (2014).

This paper consists of 5 sections. Section one is the introduction. Section two contains a presentation of the relevant data and a brief introduction to the properties of the DOC in English. Section three discusses the underlying syntactic structures of the DOC and PC in English, together with the precise mechanism of case valuation in the active and in the passive. Section four offers a detailed analysis of the triggers and nature of object fronting in DOCs and PCs, i.e. what causes the movement and how it proceeds. Section five concludes the paper.

## 2. The properties of English DOC

Before we proceed with the actual discussion of the instances of the DOC acceptable in English, one remark concerning the sequence of objects is in order. In languages with rich inflectional systems, the status of each object can be recognized by its inflectional affix- the IO is usually marked with the dative case and functions most often as a Recipient or Benefactor, the case of the DO is valued as the accusative and the DO usually represents a Theme. ${ }^{1}$ Initially, Old English (OE) was this kind of language but it gradually changed. First the case syncretism occurred (the same ending began to denote two or more cases, e.g. the dative and the accusative or the dative and the genitive), then the inflectional case marking disappeared altogether. ${ }^{2}$ This process started in late Old English and resulted in establishing the IO-DO word order, when both objects were DPs, or so-called Prepositional Dative, with the nominal DO followed by an IO realised by a PP headed by to. ${ }^{3}$

In contemporary English the acceptability of the DOC patterns varies among dialects: American English and certain British English allow only IO-DO DOC. The speakers of some British dialects find also the DO-IO sequence equally acceptable. In this analysis we concentrate on the DOC structures available in the British English dialects, which allow objects to occur in both sequences.

### 2.1. The data

The examples in (1) illustrate all the DOC patterns possible in English in the active. The acceptability of this word order is closely related to the part of speech both objects get realised by. The DO-IO sequence seems to be the most difficult for native speakers to accept when DPs surface as both objects as in (1c). We are going to support our analysis with an in-depth study of this aspect of British English, based on the judgments of native speakers of different dialects, from different backgrounds and with different levels of education, carried out by Haddican (2010). He claims that (1c) is considered grammatical in the variety of English spoken in the Manchester area, Hughes and Trudgill (1979:21) list similar sentences as grammatical as well. The grammaticality of examples increases when the DO is a pronoun and

[^0]the IO a DP, as in (1d) and (1e). Generally, the speakers of English are more willing to consider the DO-IO DOC grammatical, when weak phonetic elements appear as both objects, such as pronouns (as in (1f)) or reduced pronouns (as in (lg)). ${ }^{4}$
(1) a. The man gave the boy a pen.
b. The man gave the pen to the boy.
?c. The man gave the pen the boy. ${ }^{5}$
$\% \mathrm{~d}$. The man gave the pen him.
$\% \mathrm{e}$. The man gave it the boy.
f. The man gave it him.
g. The man gave it ' im .

The sentences in (2) illustrate the formation of passive sentences with the English DOC. We need to emphasise here the fact that although certain speakers accept the DO-IO object order does not entail that the DO passivisation is attested in their idiolect. On the other hand, the speakers allowing the DO passivisation always perceive the DO-IO sequence as grammatical.
(2) a. The pen was given to the boy.
b. The boy was given the pen.
$\% \mathrm{c}$. The pen was given the boy.
$\% \mathrm{~d}$. The pen was given him/im.
As the examples in (2) illustrate, either the DO or the IO can become the subject of a passive sentence in English. However, when the DO becomes a passive sentence subject, the majority of English speakers exhibit preference for the IO to surface as a PP headed by to, as in (2a). The most controversial is example in (2c), where the DO becomes the subject in the passive and the IO is realised by a DP. The controversy is diminished in (2d) when a phonetically weak element functions as an IO.

In English, either object can occur sentence initially both in the active (as in (3)) and in the passive (as in (4)). However, they are not neutral utterances and are only acceptable in particular discourse situations.
(3) a. The pen, the man gave to the boy/him.
b. To the boy/To him, the man gave the pen.
$\%$ c. The boy/Him, the man gave the pen.
d. The pen, the man gave the boy/him.
(4) a. The pen, the boy/he was given.
$\% \mathrm{~b}$. The boy/him, the pen was given.
c. To the boy/him, the pen was given.

[^1]In the examples above with the sentence initial objects, no matter whether in the active (in (3)) or in the passive (in (4)), the fronted object is evidently emphasised. Such a sentence would not be used as an answer to a fairly neutral question What did the boy get for his birthday? assuming a relatively low familiarity with the situation but it would rather answer the question Did the boy get a pen or a book? indicating a greater knowledge of the discourse context.

### 2.2. Alternative Projection

The term Alternative Projection has been introduced by Larson (1990) to characterise the suggestion that the DOC and the PC instantiate two different underlying structures, since they exhibit semantic and syntactic properties too different to be connected via transformations. ${ }^{6}$ Why is it necessary to discuss the issue of an Alternative Projection here? Two questions connected with this phenomenon can be raised, one whether the DO-IO DOC in English exemplifies a 'true' DOC or whether this structure is derived from a PC by the loss of the preposition (either to or for). The other question concerns the issue whether the DOC and the PC are derivationally related to each other.

The answer to the former question is provided by Haddican (2010), Holmberg and Haddican (2011), Biggs (2014, 2015), among others, who analyse the DO-IO DOC in English. Haddican (2010) underlines the structural and transformational similarities between the DOIO and the IO-DO structures (e.g. allowing or not nominalisations to be built or inducing or not Person Case Constraint effects) as well as the discrepancies between the PC and both types of DOC (IO-DO and DO-IO DOC exhibit properties different from the PC). ${ }^{7}$ Moreover, Bruening (2010a), following a number of papers by Bresnan (2007), Bresnan, et. al. (2007), Bresnan and Nikitina (2009), among others, claims that not all occurrences of PC are true PCs but in fact instantiate DOCs with a reversed order, especially when the IO is realized by a prosodically heavy element, like a sentence.

The supporters of the Alternative Projection account for the structures of the DOC and the PC either in an asymmetric way with two separate underlying representations, e.g. the DOC with the Applicative Phrase (e.g. Anagnostopoulou (2003), Cuervo (2003), Pylkännen (2008)) and the canonical representation of the PC with a PP or they propose symmetric structures with an empty prepositional projection in the DOC. The symmetric approach can be found in Harley (2002), who suggests a representation of ditransitive verbs with two projections, constituting small clauses. In the DOC, the CAUSE predicate ( $\mathrm{v}_{\text {CAUSE }}$ ) selects an External Argument (EA, the subject) and a prepositional component $\mathrm{P}_{\text {HAVE, }}$, whereas in the PC

[^2]the PP is headed not by to but an abstract locative Preposition $\mathrm{P}_{\mathrm{Loc}} .^{8}$ However, Bruening (2010b) criticises attempts to account for the structures of the DOC and the PC in a symmetric manner and provides arguments against the presence of small clauses in either structure or considering the PP to be a small clause.

## 3. The syntactic structure of the DOC in English and case valuation

### 3.1. The structure of the DOC in English

The structure of the DOC proposed in this paper contains the Applicative Phrase. The discussion concerning the syntactic structure of this construction in English excluded the presence of High Applicatives in English (e.g. Boneh and Nash (2011), Cuervo (2003), Pylkkänen (2008), Slavkov (2008), Grashchenkov and Markman (2008)). ${ }^{9}$ Since our aim here is to propose a structure of the English DOC which allows us to account for the fronting of objects and the passivisation of either object, we adapt a relatively straightforward proposal made for the Polish DOC by Citko (2011) for the English DOC. ${ }^{10}$ The structure of the English DOC is depicted in (5) below:
(5)


Citko (2011:145)
This structure might seem a little problematic, especially since the DO is situated further away from the phase head and this could lead to locality violations - any syntactic operation from the phase head targeting the DO would have to cross the IO. However, if combined with additional assumptions concerning case valuation, this structure proves to be an efficient tool to account for object dislocation and passivization possibilities in the English DOC. In order to prove that, let us now turn to the issue of case valuation in English.

[^3]
### 3.2. The mechanism of case valuation in the English DOC

The issue of case valuation is quite complicated in English, as the inflectional marking has been lost, hence the case of nominal expressions must be determined in some other way. Bartczak-Meszyńska (2013) and Bondaruk and Bartczak-Meszyńska (2014) attempt to determine the cases of objects in Modern English (ME) by the diachronic analysis of the English case system and a comparison of English data with the contemporary German DOC.

In Old English, each nominal expression, whether a DP or a pronoun, was clearly marked for case by means of inflectional endings. Therefore, it is not surprising that the word order in OE was relatively free and both IO-DO and DO-IO sequences were attested, as the theta role of each object could have been identified by its case. Moreover, object initial sentences occurred significantly frequently and were not as stylistically marked as they are today, as illustrated in (6) below.
(6) Dem acennendan Cynige we bringað gold. Stor we him bringap, gif...
the born king $_{\text {DAT }}$ we bring gold incense we him bring, if...
'To the born king we bring gold. We bring him incense, if...'
Homilies of Ælfric I, I 7.118.4
The ways of expressing the passive in Old English also differ significantly from ME. In OE, the structure called impersonal passive, no longer acceptable, was attested. This structure consisted of a dative or genitive object with a verb in third person singular and it lacked the nominative subject. The impersonal passive is represented in (7) below.
(7) ... buton him durh his hreowsung \& durh Godes miltse gehopen weorde but him-DAT through his penitence and through God's mercy helped become
'... but he is helped by his penitence and by God's mercy.'
Alfred's Cura Pastoralis $251 \quad$ Bondaruk and Charzyńska-Wójcik (2003:347)
As illustrated in (7) in the impersonal passive the dative object occurring sentence initially remains unaffected by fronting- the dative does not change into the nominative. However, this type of structure was not attested with accusative objects, as discussed in detail in Bondaruk and Charzyńska-Wójcik (2003: 345-349). Another way of expressing the passive in Old English was the direct passive, where the accusative DO in the active becomes the nominative subject in the passive. Compare the example in (8), taken from Bondaruk and Charzyńska-Wójcik (2003: 344):
(8) pu eart on eallum pingum wel gelæred.
you are in all things well taught
'... you are well instructed in all things.'

The most obvious difference between the instances of the impersonal passive, as in (7), and the direct passive, as in (8), except for the case of nominal phrases, is the verbal concord- now the verb agrees with the nominative subject which is marked for the second person singular.

The impersonal and the direct passive were the most common ways of expressing the passive in OE, as the indirect passive was not acceptable. The indirect passive is a construction
where the dative object becomes the subject in the passive with a change of case into the nominative. The means of expressing the passive in English began to change, when case syncretism took place- the remaining forms, like e.g. him, could denote either the dative or the accusative. The first instances of the indirect passive emerged as early as early Middle Englishdue to the lack of case distinction on objects, monotransitive verbs with the dative object adopted the case change mechanism of the direct passive- this resulted in the dative becoming the nominative. Later, the pattern affected the ditransitive constructions, as well.

Taking these processes into consideration, Bartczak-Meszyńska (2013) and Bondaruk and Bartczak-Meszyńska (2014) propose that the dative changed into the accusative in English. Apart from the diachronic analysis of English facts, they support this claim with the comparison of English structures with their (Modern) German equivalents. After both the direct and the indirect passive became attested in English, the DOC acquired the properties characteristic for the double accusative DOC in German and became subject to the same transformations as its German counterpart. Since both objects can become subjects in the passive, their case has to be structural (the dative is inherent ${ }^{11}$ ). Moreover, the properties of the dative objects in Old English exhibit striking parallels to the properties of the dative objects in (Modern) German. The dative object can appear sentence initially but it does not change in the passive; structures like the impersonal passive in Old English are still attested in German, which is illustrated in (9).
(9) Ihr kann von ihr Mutter geholfen werden.
she $_{\text {Dat }}$ can by her mother helped be
'She can be helped by her mother.'
Taking the discussion above into consideration and assuming that the case of both objects is accusative, we suggest the structure in (10), which illustrates the case valuation mechanism in the English DOC.


Since we proposed that both objects bear the accusative case, we need to have two Probes to value the two occurrences of structural case. Following Citko (2011), it is assumed that v is one source of case in this type of structure, the other is the Applicative head. Consequently, the Applicative in English is not entirely typical, since it does not value the dative but structural accusative, exactly like the Applicative in the German double accusative DOC. This

[^4]proposal differs from traditional proposals in yet another way: v values the case of the IO and the DO has its case valued by the Applicative.

Such an approach accounts for the existence of symmetric passive ${ }^{12}$ in English: passive morphology absorbs the ability to value accusative either on v or on the Applicative. The object of the Probe affected by the passive morphology with an unvalued case is then forced to become a subject and enter Agree with T, which values its case as the nominative.

### 3.3. The syntactic structure of the PC in English

The tree diagram in (11) below represents the 'standard' syntactic structure of the PC in English. ${ }^{13}$
(11)


Since in this structure there is only one 'free' DP (not embedded in the PP), the DO, its case has to be valued as the accusative by the phase head v. The structure in (11) does not contain the Applicative Phrase but its absence does not entail that the case of the second object (either a DP or a pronoun) remains unvalued- its case is valued by the Preposition in the PP.

## 4. Object fronting out of the DOC and the PC in English

### 4.1. Object fronting in the active

As has already been mentioned, either object can occur in the sentence initial position. Since such sentences are stylistically marked and the resulting word order visibly influences the meaning of the utterance, we assume that the process responsible for the object displacement must be connected with Information Structure. ${ }^{14}$ Since object fronting represents the emphasis on an element already known to the speaker, so called 'old information', we assume

[^5]that it instantiates Topicalization. ${ }^{15}$ Let us now have a look at how the derivation of sentences with a fronted object proceeds. The sentence in (12) exemplifies the Topicalization of the IO.
(12) a. Her/The girl, Bob gave the pen. ${ }^{16}$
b.


The derivation begins with the merger of the DO with the Applicative (the Applicative values the accusative case on the DO), which is followed by the merger of the IO in the Specifier position of the Applicative Phrase (ApplP). The VP merges with the ApplP, as a part of the vP phase. The External Argument (EA, the subject) is in the Specifier, vP position. The phase head $v$ values the accusative on the IO. The object undergoing fronting has to possess an unvalued feature Topic (uTop), which allows for its further movement (according to minimalist assumptions, all processes have to be syntactically justified, they involve feature checking and happen to prevent the derivation from crashing). In (12) the topicalized object is the girl/her, which moves to the Specifer of the phase head, the vP , is attracted by the Edge Feature (EF) of v. The case of the subject has to be valued, therefore, the EA enters the operation Agree with T, which values its case as the nominative. The subject moves to the Specifier, TP to satisfy the EPP feature on T. The verb moves to v . After the merge of the next phase $\mathrm{CP}^{17}$, containing the Topic Phrase (TopP), the TopP values the uTop feature on the object in the Spec, vP and attracts it to its Specifier position, thanks to the EF of the TopP.

The derivation of a sentence with a topicalised DO occurs in a similar way, as illustrated in (13).

[^6](13) a. The pen, Bob gave her/the girl.
b.


Here, as in the derivation above, the Applicative merges with the DO, values its case as the accusative, the IO is merged in the Specifier of the Applicative phrase. The VP merges with the Applicative, the EA merges in the Specifier, vP position. The phase head values the accusative on the IO. The EA enters Agree with T and moves to Spec, TP. This time it is the DO with the uTop which moves to the Specifier of the phase head. After the merge of the TopP into the structure, the TopP values the uTop of the DO and the DO moves to the Specifier, TopP, attracted by its EF.

In the ditransitive constructions with the PD, it is also possible to displace either the nominal DO or the PP object. The example in (14) illustrates the fronting of the DO, while the PP remains in its original position.
(14) a. The pen, Bob gave to the girl/her.
b.


The derivation of the sentence in (14) occurs in the following manner: the nominal expression merges with the preposition, which values its case. The PP merges with the VP, with the DO in its Specifier position. The phase head $v$ values the case of the DO as the accusative. The DO still possesses the unvalued feature uTop and moves to the Specifier, vP, triggered by the EF of the phase head. The subject Bob enters Agree with T, which values its case as the nominative and attracts the EA to Spec, TP to satisfy the EPP feature on T. As the TopP merges into the structure it values the uTop on the DO and triggers its movement to Spec, TopP thanks to its EF.

When the PP object gets topicalized it also has to have a uTop, which is presented in (15).
(15) a. To the girl/ to her, Bob gave the pen.
b.


In (15), P to merges with a DP, values its case and together they constitute a PP. This PP merges with the VP, the DO merges into the structure in the Specifier, VP position, the phase head $v$ values the accusative case on the DO. The EA merges in the Specifier of vP. The PP object with an uTop is attracted by the EF of vP and moves to the Specifier position of the phase head. The EA has its case valued as the nominative by T and moves to Spec, TP to satisfy the EPP feature of T. When the TopP merges with the TP, it values the uTop of the PP object and attracts it to the Spec, TopP. The verb moves to v .

The derivation characterised above, when the object moves together with the P , exemplifies the process called Pied-Piping. However, in English the DP object can move out of the PP and become topicalized on its own, leaving the preposition in it first merge position, which is called P-Stranding ${ }^{18}$.

In English, both Pied-Piping and P-Stranding are acceptable. The sentence in (15) above is an instance of Pied-Piping. The process of P-Stranding is illustrated in (16).

[^7](16) a. The girl/her, Bob gave the pen to.
b.


How does this derivation differ from the one in (15) above? The whole PP is not subject to topicalisation, only the DP complement of PP possesses un unvalued feature Top. Hence, in the final stage of the derivation it is the DP alone that moves to the Specifier, Top and the preposition remain in its first merge position.

### 4.2. Object fronting in the passive

In the passive, object fronting can be caused by two processes: when only one object is fronted, it usually represents Passivisation. If both objects move, one instantiates Passivisation, the other Topicalization. Let us start with the process of passivisation, which is the focus of the next section.

### 4.2.1. Passivization

The sentence in (17) illustrates the direct passive - the DO in the active becomes the subject in the passive, which is accompanied by the change of its case in the nominative.
(17) a. The pen was given the girl/her. (the DO passivised)
b.


In (17) the derivation proceeds in the following manner. The Applicative merges with the DO, the IO is merged in its Specifier position. v values the case of the IO as the accusative. The passive morphology absorbs the ability of the Applicative to value case and the DO has to seek another Probe to have its unvalued case feature valued, in order to prevent the derivation from crashing. The relevant Probe to value the case of the DO as the nominative is T . However, the IO is closer to T than the DO and it would induce the Defective Intervention Effect and thus block Agree between T and the DO. Consequently, to enter Agree with T, the DO needs to move to a position c-commanding the IO. Following Bondaruk and BartczakMeszyńska (2014), we assume that this position is Specifier, vP. They propose that the movement of the DO is triggered by the Edge Feature (EF) of v, which has not been affected by the passive morphology. Since $v$ values the accusative on the IO, it can still be considered a phase head and as such possesses the EF. Now the DO is closer to T than the IO, T values the case of the DO as the nominative and attracts it to its Specifier position to satisfy the EPP feature on T .

There are some issues in the derivation outlined above that need further elaboration. First, although $v$ is in the passive, it is still perceived as a phase head. Bondaruk and BartczakMeszyńska (2014), following Chomsky $(2000,2001)$ claim that if v has not lost its ability to value the accusative (although it lacks the EA), it is transitive and transitive v constitutes a phase head. Secondly, the DO is attracted to Specifier, vP, although v does not value its case. In order to provide a solution to this problem, Bondaruk and Bartczak-Meszyńska (2014) assume that v enters Agree with both the IO and the DO (multiple Agree, cf. Hiraiwa (2002)). As the IO is closer to the phase head, it values the $\varphi$-features on v and v values the case on the IO as the accusative. The syntactically active DO with an unvalued case moves to the Specifier of the phase head to satisfy its EF and is available to another Probe. Any other scenario would leave the case feature of the DO unvalued and cause the derivation to crash.

Let us now turn to the indirect passive.
a. The girl/She was given the pen. (the IO passivised)
b.


The derivation of the indirect passive is less complicated than the derivation in (17) above. The DO merges with the Applicative, which this time is not affected by the passive morphology and values the case on the DO as the accusative. The IO merges in the Spec, ApplP and the Applicative Phrase merges with the phase vP, whose case valuation ability has been rendered inactive by the passive morphology. Since the IO is merged above the DO, the

DO cannot interfere in the syntactic operations between the IO and the projections in the next phase. After T enters the derivation, it values the case of the IO as the nominative and attracts the IO to its Specifier position to have its EPP feature satisfied.

The derivation of the passive sentence with the PC is even more straightforward because there is only one object that can enter Agree with T and become subject of the passive sentence.
(19)
a. The pen was given to the girl/her.
b.


The nominal expression (DP the girl or the pronoun her) merges with the PP, which values its case. The PP merges with VP, the DO merges in the Specifier, VP. The vP enters the derivation but cannot value the case of the DO, due to the fact that the passive morphology absorbs its case marking ability. The TP merges with vP and values the case of the DO as the nominative, which moves to Spec, TP to satisfy the EPP on T. This is the only acceptable derivation with the PC, because the PP cannot enter Agree with T and satisfy the EPP feature of T , as illustrated in (20).
(20) a. ${ }^{*}$ To the girl/her was given the pen.
b.


### 4.2.2. Topicalization

When in the passive both objects leave their first merge position, their displacement instantiates distinct processes: one of the objects gets fronted by Passivisation, the fronting of the other is triggered by Topicalization. The choice depends on the passive morphology, the
passive morphology absorbs the case valuing abilities of one of the Probes. The Goal of the Probe affected by the passive morphology must look for another Probe to have its case valuedT is the available Probe to value case, so the Goal enters Agree with T and becomes a subject in the passive. The movement of the other object, whose case feature is valued in-situ, exemplifies Topicalisation.

Let us now analyse object movement in greater detail.
(21)
a. The girl/Her, the pen was given.
b.


In (21) above the DO undergoes passivisation and the IO becomes the Topic. The derivation proceeds in the following manner: the Applicative merges with the DO, the IO merges in the Specifier of the Applicative position. Whereas the phase head values that case of the IO as the accusative, the Applicative is rendered inactive by the passive morphology and cannot value the case of the DO. The DO moves to the Specifier of vP , as in (17b) above. The DO enters Agree with T, which values its case as the nominative. The IO is still active- it has its case feature valued in the first merge position but its uTop feature remains unvalued. After the DO enters Agree with T, it moves to Specifier, TP, to satisfy the EPP on T. The TopP merges with the TP, TopP values the uTop on the IO and its EF feature induces the fronting of the object attracting it to Specifier, TopP.
(22) a. The pen, the girl/she was given.
b.


In the derivation represented in (22), it is the DO that has an uTop feature and the IO becomes the subject. The DO merges with the Applicative, which values its case as the accusative, its uTop feature remains unvalued. The IO merges in the Spec, ApplP and the Applicative Phrase merges with the vP which is affected by the passive morphology and cannot value the case of the IO. The IO enters Agree with T which values its case as the nominative and it moves to Spec, TP to satisfy the EPP on T. As the TopP enters the derivation, it checks the uTop on the DO and attracts the DO to Spec, TopP.

Now let us consider object fronting in the ditransitive constructions with the PC. The examples in both (23) and (24) contain a DO realised by a DP and the pronoun. However, they represent different processes. In (23) below, it instantiates Pied-Piping, since the PP moves together with its complement. On the other hand, in (24) the P remains in its first merge position, hence the sentence in (24) represents P-Stranding.
(23) a. To the girl/her, the pen was given.
b.


In (23) above the derivation happens in the following manner: a DP/pronoun merges with the preposition, which values its case. The whole PP has to possess the feature uTop. Then the VP enters the derivation with the DO in its Specifier position. The DO seeks a Probe to have its case valued, even after the vP merges into the structure, since the ability of the phase head $v$ to value case has been rendered inactive by the passive morphology. It undergoes Agree with T and moves to Spec, TP to satisfy the EPP feature on T. As soon as the TopP enters the derivation, it values the uTop of the PP and attracts it to Spec, TopP.
(24) a. The girl/her, the pen was given to.
b.


Since the sentence in (24) allows P-Stranding, it must be only the DP complement of the PP which has the uTop. The derivation proceeds in the way similar to the derivation in (23). The preposition values the case of its complement but it cannot value its Top feature. The VP merges into the structure with the DO in its Specifier position. The VP merges with $v$ which is unable to value the case on the DO, hence the DO undergoes Agree with T, has its case valued by T as the nominative and moves to Spec, TP to satisfy the EPP feature on T. When TopP merges with the TP, it values the uTop on the complement of the PP and attracts it to Spec, TopP by its EF.

## 5. Conclusions

The aim of this paper has been to analyse the patterns of displacement the objects in the English DOC can undergo. Our study involved not only objects realised by nominal expressions, like DPs and pronouns but also the PP object in the Prepositional Construction. We considered here all the possible types of the ditransitive constructions, although not all of them, such as the DO-IO DOC, are perceived as acceptable by all the native speakers of English.

First, we established the basic underlying representation of both the DOC and the PC, applying Citko's (2011) structure with the Low Applicative to English. Secondly, in order to investigate the case valuation mechanism in the English DOC, we decided, that since either object can become the subject in the passive, its case has to be structural. Taking the diachronic properties of the English case system and its comparison with German, we assumed that the case on both objects has to be valued as the accusative.

The remainder of this paper has been devoted to the analysis of the displacement either one object or two objects can undergo simultaneously to the front of the sentence. It has been concluded that in the active, when the object moves to the sentence initial position (in such cases only one object can move in the front of the subject), its dislocation has to be an instance of Topicalization. As sentences beginning with an object are extremely stylistically marked, and are used only in particular discourse situations, their derivation must reflect Information Structure.

In the passive, if an object moves forward, it becomes the subject of the passive sentencethis process is called Passivisation. If both objects move simultaneously, their movements must be induced by different factors: one undergoes Passivisation, the other, at the left edge of a sentence, is topicalized. The choice of the exact process the objects are subject to depends on the passive morphology- the object whose Probe is affected by the passive morphology has to have its case valued as the nominative by T, hence undergoes Passivisation. If the other object moves, this is caused by reasons related to Information Structure.

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# Derivatives based on participles in Irish and Polish and the inflection-derivation distinction 

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#### Abstract

Greenberg's Universal 28 says that 'if both the derivation and inflection follow the root, or they both precede the root, the derivation is always between the root and the inflection' (Greenberg 1966: 93). Booij (1994: 27) undermines this by allowing inherent inflection to feed derivation. There is abundant literature showing that inherent inflection can feed derivation in Germanic, Romance and Slavic languages (Booij 1994, 1996, Chapman 1996, Rainer 1996, Cetnarowska 1999). The aim of this paper is to describe and compare derivational categories related to participle forms in Irish and Polish. These include among others agent nouns, adjectives of tendency/inclination, resultative passive adjectives and facilitative adjectives. Stump (2005:52) points out that the terms present and past participle are, in fact, misnomers since participles are uninflected for tense, and they should be regarded as stems conveying aspect information plus the lexical information of the root. The existence of derivatives based on inflected forms is usually taken as evidence against the inflection-derivation dichotomy, and in favour of a tripartition into contextual inflection, inherent inflection and derivation. The paper addresses the theoretical ramifications of the existence of such derivatives for inferential-realisational approaches (Stump 2001), such as for example Beard's (1995) Lexeme-Morpheme Base Morphology, which separates the operations on the grammatical (morpholexical and morphosyntactic) features and operations responsible for the morphophonological modification of the root/stem.


Keywords: inherent inflection, inflection feeding derivation, Irish, participle

## 1. Introduction

Greenberg's Universal 28 says that 'if both the derivation and inflection follow the root, or they both precede the root, the derivation is always between the root and the inflection' (Greenberg 1966: 93). However, Booij (1994: 27) draws attention to certain inflectional formatives, to which he refers as inherent inflection, which can precede strictly derivational markers. There is abundant literature showing that inherent inflection can feed derivation in Germanic, Romance and Slavic languages (Booij 1994, 1996; Chapman 1996; Rainer 1996; Cetnarowska 1999). The aim of this paper is to identify and analyse derivational categories related to participle forms in Irish and Polish. These include among others active adjectives,
resultative passive adjectives, adjectives of tendency/inclination, facilitative adjectives and agent nouns. The existence of derivatives based on inflected forms is usually taken as an argument against the inflection-derivation dichotomy (Perlmutter 1988: 95), and a piece of evidence in favour of a tripartition into contextual inflection, inherent inflection and derivation (Booij 1994). This stand is a natural corollary of the morpheme-based approach to morphology. This paper will address the theoretical ramifications of the existence of such derivatives for inferential-realisational approaches (Stump 2001), such as for example Beard's (1995) Lexeme-Morpheme Base Morphology, which separate the operations on the grammatical (morpholexical and morphosyntactic) features from operations responsible for the morphophonological modification of the root/stem.

Participle is a term originally applied to adjectival forms of verbs in ancient Greek. Matthews (1997: 267) points out that they were regarded as a 'sharing' element (Greek metokhē) since they shared certain characteristics of verbs and nouns, i.e. they combined inflection for tense and aspect with inflection for case. Kuryłowicz (1964:34) argues that conjugation includes nominal subparadigms and so participles and infinitives may discharge the function of nouns and adjectives without any morphological modification. Haspelmath (1996) puts forward the concept of word-class-changing inflection. In words resulting from inflectional word-class-changing morphology, the internal syntax of the base is preserved, whereas in words arising as a consequence of derivational word-class-changing morphology, the internal syntax of the base tends to be altered and assimilated to the internal syntax of primitive members of the derived word-class. German participles, as in (1) below, can be regarded as an instance of inflectional word-class-changing morphology:
(1) ein den Richter überraschendes Faktum
a the Judge-acc. surprising-nom.sg. fact-nom.sg.
'a fact that surprises the judge'
The external syntax is nominal as the participle überraschendes agrees in number, case and gender with its head Faktum 'fact'. However, its complement den Richter is in the accusative case, which means that the internal syntax is verbal, hence preserved. German participles are, therefore, non-finite verb forms.

With regard to derivational operations, Kuryłowicz (1936) was the first to point to the distinction between lexical and syntactic derivation. In the semantic or functional approach to word-formation, implemented in Slavic studies on word-formation, formatives are divided into 'mutational', 'modificational' and 'transpositional' (Dokulil 1962; Grzegorczykowa, Laskowski and Wróbel 1984). Mutation involves a semantic modification and a change in lexical category (e.g. Agentives, Instruments, Facilitative Adjectives), modification only a change in meaning (e.g. Diminutives and prefixal formations in English), whereas the process of transposition is asemantic and brings about only a change in lexical category (Nomina Actionis, Nomina Essendi, Relational Adjectives). Szymanek (1989: 125) argues that there are no transpositional processes whose sole function is to shift verbs to the category of adjectives. He dismisses the possibility of deriving adjectives from participles on the grounds that 'there are no overt morphological markers of the process involved and, besides, the two forms are not strictly equivalent semantically'. However, Borer (1990) and Beard (1995) regard active
adjectives as distinct from participles and at the same time as derived from verbal bases. Beard (1995: 196, 321) points out that the form of the active adjective, also referred to as the subjective/agentive qualitative adjective, and that of the active participle do not always coincide, and they show different morphological and syntactic characteristics, as illustrated in (2) below:
(2) Affixes

| Affixes | Active Adjective |
| :--- | :--- |
| Same (very/un)surpris-ing |  |
| is | is (very/un)excit-ing <br> is (very/un)mov-ing |
| Distinct | is (very/un)product-ive <br> is (very/un)repent-ant <br> is (very/un)compliment-ary |

## Active Participle

(not) surpris-ing (very much)
(not) excit-ing (very much)
(not) mov-ing (very much)
(not) produc-ing (very much)
(not) repent-ing (very much)
(not) compliment-ing (very much)

The suffix -ing is the only marker of the syntactically formed participle, whereas the lexically derived adjective is additionally marked with -ive, -ant and -ary. The adjective can be prefixed with un-. Participles, on the other hand, can only be made negative by the addition of not. An -ing form is an adjective if it can be turned into an adverb by the addition of -ly (e.g. surprisingly) and if it can be preceded by a degree adverb such as very, so, too. These intensifiers are incompatible with participles which require very much or a lot. Active adjectives (unlike participles) are not confined to the predicative position and can be used attributively as in:
(3) a (very/un)surprising result
a (very/un)moving story
Biber et al. (1999: 68-69) also note that if we are dealing with the verb, the -ing form will have a progressive (dynamic) meaning and will be followed by a verb complement (such as an object) as in (4a). If it is an adjective, it will not take verbal complements and its meaning will be stative, as in (4b):
(4) a. His voice was irritating me.
b. His voice was (very) irritating.

According to Bauer (1983) past participles serve the function of adjectives when they are used attributively in prenominal positions, as in a heated argument, a married man, the destroyed building. Some participles can be modified by very, as in his very reduced circumstances, or can serve as derivational bases to which the suffix -ly is attached in the formation of adverbs, e.g. heatedly. In Borer (1990) we find examples such as an unwoven rug and the uncrushed resistance, which further confirm the adjectival status of the participles. Adams (2001) observes that adjectives related to past participles show resultative semantics, as in The keeper's hand was severely bitten.

In morphological models which adhere to the 'separation hypothesis' (Beard 1981, 1986, 1995; Laskowski 1981; Szymanek 1985; Malicka-Kleparska 1985; Bloch-Trojnar 2006) the formal identity of the adjective and the present/past participle does not mean that one is
derived from the other. Each of them may be regarded as related to the verbal root by a lexical and a syntactic operation respectively, which happen to be spelled out by the same formal exponent. There is one phonological entity, be it -ing or -ed/en, which may be put into inflectional and derivational uses.

In what follows, we shall take a closer look at those derivational categories in Polish and Irish which show a formal and semantic affinity to participles, and weigh the pros and cons of regarding them as products of inflection feeding derivation.

## 2. Participles and departicipial derivatives in Polish

### 2.1. The present and the passive participle as inflected verb forms

The present participle is characterized by the ending $-a c(y)$, and can only be formed from imperfective verbs, whereas the passive participle is formed from transitive verbs and is marked with the suffixes $-n(y)$ or $-t(y)$, as illustrated in (5) below:
(5) Verb
pisać 'to write, impf.'
pić 'to drink, impf.'
wypić 'drink up, pf.'
pracować 'to work, impf.'

| Present Participle | Passive Participle |
| :--- | :--- |
| piszacy | pisany |
| pijacy | pity |
| - | wypity |
| pracujacy | - |

High generality coupled with formal and semantic predictability, led Laskowski (1984) and Cetnarowska (1999) to conclude that participles are inflectional forms of verbs. Borrowed transitive verbs such as kserować 'make a Xerox copy' or resetować 'reset', will give rise to passive participles if they are transitive and to active ones providing that they are imperfective, kserowany, kserujacy, resetowany, resetujacy. In formal terms, the suffixes -n-/-t- and -acc- are not in competition with other co-functional markers. Participles preserve the internal syntax of finite verbs since they can take the direct and indirect objects, and can be combined with manner and locative adverbials. Their external syntax is adjectival, i.e. they agree in case, number and gender with the head nouns they modify. Consider the examples in (6) below (Cetnarowska 1999: 167-68):
(6) a. oddane później właścicielom psy
return-PPRT-nom.pl later owners-dat.pl. dog-nom.pl
'dogs that were returned later to their owners'
b. znaleziony przez chłopców w jaskini skarb
find-PPRT-nom.sg.masc. by boy-gen.pl. in cave-loc. treasure-nom.sg.masc.
'the treasure found by the boys in a cave'
Notably, the examples in question seem a bit stilted and artificial. Their variants with participles postposed, in which case they could be interpreted as reduced relative clauses, sound decidedly better, i.e. psy oddane później właścicielom 'dogs that were returned later to
their owners' and skarb znaleziony przez chłopców w jaskini 'the treasure found by the boys in a cave'.

### 2.2. Derivatives based on the present participle

Cetnarowska claims that the present participle can undergo conversion into an adjective and argues for a semantic difference between the two categories (see also Bartnicka 1970 and Rabiega-Wiśniewska 2008). Namely, the adjective, as opposed to the participle, has a modal (potential) reading 'such that can V ', as in (7):
(7) a. napój chłodzaccy 'cooling drink' (cf. chłodzacy 'cooling')
b. pocisk zapalajacy 'incendiary shell' (cf. zapalajacy 'setting fire to something')
c. bomba burzaca 'demolition bomb' (cf. burzacy 'destructive')
d. proszek wybielajacy zęby 'whitening tooth paste' (cf. wybielajaccy 'whitening')
e. tabletki łagodzace bóle głowy 'pills relieving headaches' (cf. łagodzacy 'soothing')

On Cetnarowska's analysis, the forms accompanied by objects in the accusative case, as in (7d) and (7e) above, are adjectives owing to their modal (potential) reading.

I would like to take her up on two points. Firstly, in view of Haspelmath's (1996) distinction, the forms in (7d) and (7e) should be regarded as instances of category-changing inflection, i.e. participles with the external syntax of an adjective and the internal syntax of a verb. If the internal syntax remains unaltered, the process involved cannot be perceived as derivational. Secondly, the semantics of the forms in -ac- need not always be potential. To put it in other words, the potential reading is indicative of category change, but forms with purely verbal semantics may also be adjectival. In traditional accounts of the transpositional category of deverbal adjectives a distinction is made between forms with unpredispositional and predispositional semantics (Kallas 1999). The former are purely transpositional and name a quality of a thing or phenomenon which is connected with an activity, process or state, e.g. znak ostrzegawczy 'a warning sign, such that warns', tkanka łaczna 'connective tissue, such that connects'. Predispositional adjectives show an extra semantic tinge, which may express potentiality uleczalny 'curable, such that can be cured', kurczliwy 'contractible'. The dividing line between the two categories may be difficult to draw in individual cases.

I agree with Cetnarowska that we are dealing with adjectives where the -ac- form is not followed by any verbal modifiers. The semantics of such forms is equivalent to that of relative clauses, e.g. balsam ujędrniajacy 'balm that firms (the body)'. Consider some more examples in (8), where no potential reading is necessarily involved.
(8) balsam ujędrniajacy 'firming body lotion'
firma sprzątajaca 'contract cleaners'
kapsutki piorące 'washing capsules'
krem nawilzajaccy 'moisturizing cream'
kuracja odchudzająca 'weight loss program'
lakier impregnujacy 'impregnating varnish'
lakier utrwalajacy (do włosów) 'firm hold hairspray'
maść gojaca 'ointment that heals wounds'

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maść rozgrzewająca 'warming ointment'
ptyn zmiękczajacy (do prania) 'fabric softener'
sprzęt nagłaśniajacy 'sound system'
system chłodzacy 'cooling system'
środek czyszczaccy (do podłóg) 'cleaner'
środek odurzajacy 'intoxicant'
środek przeczyszczajacy 'laxative'
srodki dezynfekujace 'disinfectant'
środki spulchniajace 'raising agent'
taśma klejaca 'adhesive tape'
tusz pogrubiajacy (do rzes) 'volumising mascara'
żel nabłyszczajaccy (do włosów/ do paznokci) 'gloss hair gel/gloss nail gel'
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Only in three cases, objects were found following the -ac- form:
(9) a. maść gojaca rany 'ointment that heals wounds'
b. balsam ujędrniajacy uda/brzuch 'lotion that firms thighs/abdomen'
c. tusz pogrubiajaccy rzessy 'volumising mascara'

Instead of the object, it is more common to find a PP complement with do 'for', as in zel nablyszczajacy (do włosów/ do paznokci) 'gloss hair gel/gloss nail gel', which means that we are dealing here with adjectives and not verbal forms preserving their argument structure. The availability of two alternative syntactic configurations might be indicative of two different -acforms, one adjectival and one verbal.

Forms in -ac- are adjectives since they can give rise to adverbs, as in chłodzacy 'cooling' $\rightarrow$ chłodzaco 'with the cooling effect', odurzajaccy 'dizzying, stupefying' $\rightarrow$ odurzajaco 'dizzyingly', łagodzący 'palliative, soothing' $\rightarrow$ łagodzaco 'soothingly' (Cetnarowska 1999). For Cetnarowska -ac- adjectives are products of participle $\rightarrow$ adjective conversion.

However, on an alternative analysis they could be regarded as derivatives based on the verbal root with the aid of the suffix -ac(y). Actually, the suffix is listed by Kallas (1999: 471477) as one of many rival suffixes rendering the transpositional function together with, e.g. $n y$, -liwy, or $-c z y$. It is worth noting that in some cases there are two forms available for a given verbal base. The forms listed in (8) take the suffix $-a c(y)$ and this suffix alone. However, there are $-(q) c y$ forms generated side by side with adjectives marked with other suffixes. They also show participial uses with verbal internal syntax. Consider some examples from the National Corpus of Polish (Przepiórkowski et al. 2012), where the form in (a) is a derivational adjective, the form in (b) is the $-(a) c y$ form in the function of the participle, and the form in (c) is homophonous with it, but is devoid of any verbal complements and is either semantically equivalent with or slightly different from the form in (a):
(10) a. przenikliwy wzrok/ból/brzęk/głos
'penetrating, keen sight/acute pain/strident sound/shrill voice'
b. Zostały mu po niej jedynie włosy, czerwona sukienka i przenikajacy wszystko zapach najtañszych perfum.
'The only traces of her were hair, the red dress and the smell of cheap perfume permeating everything.'
c. Niekiedy zawiewał zimny, przenikajacy wiatr.
'There were gusts of penetrating wind.'
a. Chodzi o masaż leczniczy, nie o ustugi seksualne. 'It's about a therapeutic massage, not sex services'
b. to komputerowy stymulator mowy, leczacy głuchych
'it's a computer speech stimulator (for) treating the deaf
c. wymienia wyłaczznie kuratora i zakład leczaccy, a nie wymienia prokuratora
'it mentions only the probation officer and the therapeutic site, it does not mention the prosecutor'
a. wędrowne ptaki 'migrating birds'
b. Resztki jedzenia sa wymarzona pożywka dla bakterii, a także przyciagaja wędrujące przez przewody wentylacyjne karaluchy
'leftovers are a perfect nutrient for bacteria, they also attract cockroaches wandering in ventilation ducts'
c. nieszkodliwy reumatyzm, słabe wędrujące bóle, spadek samopoczucia
'mild rheumatism, weak changeable pains, feeling low'
a. ustyszałem w tej chwili błagalny szept Iwony 'then I heard Ivonne's begging whisper'
b. Jego pokorny gest błagający o litość i o zwłokę jest więc aż nadto zrozumiały
'his humble gesture begging for mercy and deferment is all too clear'
c. ostatnimi jego słowami był błagajacy krzyk - synku, za co, nie zostawiaj mnie!
'His last words were a begging cry - my son, what for, don't leave me!'
a. Niezbyt wojowniczy Bolesław Wstydliwy wrócił zresztą do Krakowa 'not too militant King Boleslaus the Shy came back to Cracow'
b. Sa jednak nasi dzielni wojujący o piękno mowy polskiej profesorowie Gasiński i Niedzielski
'there are the brave professors Gasiński and Niedzielski fighting for the beauty of the Polish language'
c. Wojujacy islam/feminizm 'militant islam/feminism '
a. Ustugi/haki/firmy holownicze 'hauling services, hooks, companies'
b. auto holujące ze zbyt dużą prędkością samochód Audi A4
'the car hauling Audi A4 at too high a speed'
c. Firmy holujace walcza coraz zacieklej o klienta
'Hauling companies are fighting ever more fiercely for customers. '
a. Wiercenia poszukiwawcze 'searching drills'
b. Policjant poszukujacy wielokrotnego mordercy 'a policeman looking for a serial killer'
c. Człowiek poszukujący i świadomy siebie wie, że walka z samotnością nie ma sensu 'a searching man who is conscious of himself knows that the fight with loneliness makes no sense'

The existence of such doublets might be due to the failure of the mechanism of blocking which is sensitive to the tenuous semantic differences between the two adjectives or it may indicate that there are two routes of forming deverbal adjectives, namely by means of derivation with the aid of the -(ac)y suffix and by means of conversion of active participles. Two alternative analyses are also available for Agent nouns. Cetnarowska (1999: 175) enumerates a number of examples where the Agent noun can be regarded as the product of conversion of the active participle, e.g. przewodniczacy 'chairperson, lit. presiding over', stużaca 'servant maid, lit. serving'. As in the case of active adjectives, we can find cases where
the process of conversion occurs parallel to the derivation of Agent nouns from the same verbal root (17b), e.g.

|  | Verb |
| :--- | :--- |
| a. | stużyć 'serve' |
|  | konać 'die' |
|  | kupować 'buy' |
|  | głosować 'vote' |
| b. | palić 'smoke' |
|  | pić 'drink' |
|  | sprzedawać 'sell' |
| kierować 'drive' |  |
|  | grać 'play' |
| pracować 'work' |  |

## NA based on the root

stużacy
konajacy
kupujacy
głosujacy
palacz
pijak
sprzedawca
kierowca
gracz
pracownik

## NA based on the present prt.

stużacy
konajacy
kиријасу
głosujacy
palacy
pijacy
sprzedajacy
kierujacy
grajacy
pracujacy
Interestingly, Grzegorczykowa and Puzynina (1999) do not recognize -ac(y) as a distinct marker of Agent nouns. This may be due to the fact that - $a c(y)$ derivatives denote Agents, but the actions they perform are not necessarily habitual or professional. They refer to the performers of transient, one-off or irregular activities. They could, therefore, be labeled Episodic Agents. This would explain the existence of doublets and the semantic link with participles.

### 2.3. Derivatives based on the passive participle

Passive participles in Polish are based on transitive verbs regardless of their aspect specification. Therefore, like verbs, they can be modified by appropriate temporal adverbials which signal the duration or completion of an action, as shown in (18a) and (18b) respectively (Cetnarowska 1999: 169):

$$
\begin{array}{llll}
\text { a. } & \text { Kaczki byty pieczone przez dwie godziny ale byty twarde. }  \tag{18}\\
\text { duck-nom.pl were roast-PPRT-impf. for two hours but were tough } \\
\text { 'The ducks were being roasted for two hours but they were tough.' }
\end{array}
$$

b. Wszystkie indyki zostały upieczone $i$ zjedzone w ciagu wczorajszego wieczora. all turkey-nom.pl. became-3pl. roasted-PF and eaten-PF in course yesterday-adj. evening-gen. 'All (the) turkeys were roasted and eaten during yesterday evening.'

Cetnarowska claims that passive participles undergo conversion into adjectives. Despite formal identity, there is a semantic difference between the two in that adjectivised participles based on imperfective verbs convey a perfective meaning and refer to results of completed actions.
(19) a. pieczony indyk 'roasted turkey' (cf. piec ${ }^{\text {I }}-$ upiec $^{\mathrm{P}}$ 'to roast')
b. malowane jajka wielkanocne 'painted Easter eggs' (cf. malować' - pomalowaćp 'to paint')
c. zapiekane warzywa 'baked vegetables' (cf. zapiekać - zapiec ${ }^{\text {P 'to bake') }}$

Furthermore, Cetnarowska's view is additionally supported by the fact that the forms in (19) have lost their verbal combinatorial properties - they cannot take temporal, manner or place adverbs, and cannot be modified by agentive adjuncts. What lends even further support to this claim is the ability of adjectives to be preposed, which is typical of the Polish word order. In the case of participles, preposing is not impossible, but it sounds awkward. For instance, it is natural to say indyk pieczony or pieczony indyk, while ?pieczony przez godzine indyk is questionable. Corpus data on the occurrence of departicipial adjectives show similar frequencies for the preposed and postposed adjectivised participles:
(20)
Passive participle
kiszony
'fermented, pickled'
wędzony
'preserved by smoking
pieczony
'baked, roasted'

## Frequency of the adjectivised participle in the postnominal position

ogórek kiszony 18
'pickle'
łosoś wędzony 4
'smoked salmon'
schab pieczony 9
'roasted pork loin'

Frequency of the adjectivised
participle in the prenominal position
kiszony ogórek 14
'pickle'
wędzony łosoś 4
'smoked salmon'
pieczony schab 6
'roasted pork loin'

```
kiszony ogórek 14
'pickle'
wędzony łosoś4
'smoked salmon'
'roasted pork loin'
```

Cetnarowska (1999: 169-170) adopts for passive participles a similar analysis to the one proposed for active participles. Namely, the forms in (20) are adjectives, but they are closely related to passive participles since they can take agentive adjuncts and complements. For Cetnarowska zapiekanych in (21) below is an adjectivised participle:
(21) Spróbuj warzyw zapiekanych przeze mnie $w$ sosie koperkowym.
try-imper.sg. vegetables-gen. baked-gen.pl. by me in sauce dill-adj.
'Try some vegetables baked by me in the dill sauce.'
This approach in our view is inconsistent. Such forms should not be perceived as adjectives, but as participles which like verbs can take typically verbal complements and adverbials (agentive adjuncts, or adverbs of manner and duration). Participles, unlike adjectives, can take on the function of the verb in a reduced relative clause (22c).
(22) a. Kurczak był duszony przeze mnie przez godzinę pod przykryciem, ale był twardy. 'The chicken was being stewed by me for an hour but it was tough.'
b. Kurczak, który był duszony przeze mnie przez godzinę pod przykryciem, był twardy. 'The chicken, which was being stewed by me for an hour, was tough.'
c. Kurczak duszony przeze mnie przez godzinę pod przykryciem, był twardy. 'The chicken, stewed by me for an hour, was tough.'

The participial markers -n/t- as in rana cięta 'a cut' or kurczak pieczony 'roasted chicken' are listed as derivational suffixes forming objective deverbal adjectives, i.e. adjectives which modify nouns spelling out the role of Patient with regard to the base verb. The formal overlap between participles and adjectives is considerable, but not complete, since there are cases where a derived 'objective' adjective is distinct from a passive participle, e.g. upraw-n(a)ziemia
'arable land' vs. uprawi-an(a) 'cultivated, pprt'. Therefore, resultative adjectives may be regarded as products of conversion of participles or derivation from base verbs.

Analogically to active participles, adjectivised passive participles can serve as bases for further derivation. Cetnarowska (1999) enumerates a number of derivational categories which can be interpreted as taking departicipial adjectives as their base. These include, among others, resultative nouns terminating in $-k(a)$. These nouns denote objects that come into existence or change their features in the course of the events denoted by the corresponding verbs. The category is productive in the area of specialized vocabulary. Some examples are provided in (23) below:
(23) Departicipial Adjective
prażony 'roasted'
kiszony 'fermented, pickled'
bity 'beaten, crushed'
wędzony 'preserved by smoking'
zapiekany 'baked'

## Resultative Noun <br> prażonka 'roasted ore' <br> kiszonka 'silage' <br> bitka 'cutlet' <br> wędzonka 'smoked bacon' <br> zapiekanka 'dish baked in oven'

Patient nouns and names of results or affected objects listed in (24) show a perfective reading like the nouns in (23) above. However, resultative nouns in (23) are formally related to imperfective verb forms, while the nouns in (24) below are formally related to perfective verbs, which, according to Cetnarowska (1999), means that they might be directly derived from inflectional passive participles.

## Departicipial Adjective/ Passive Participle

a. opętany 'possessed of evil' przesiedlony 'displaced, rehoused’ wygnany 'expelled, banished' wychowany 'brought up' wybrany 'chosen' wysłany 'sent'
b. roztrzepany 'beaten up' nabyty 'acquired' zbity 'fused, collapsed'

Patient Noun marked with $-e c,-n i k,-e k,-k(a)$
opettaniec 'one possessed of evil'
przesiedleniec 'emigrant, displaced person' wygnaniec 'exile, outcast'
wychowanek 'alumnus'
wybranka 'the girl of one's choice'
wystannik 'envoy'
Object Noun marked with -ec, $-e k,-k(a)$
roztrzepaniec 'sour milk that has been beaten'
nabytek 'acquisition'
zbitka 'fusion, blend'

Szymanek (2010: 50-56) points to the possibility of deriving the nouns in (24) directly from verbal bases by means of the suffixes-aniec/-eniec:
(25) Verb
skaz-ać 'to condemn somebody' wysiedl-ić 'to displace somebody' post-ać 'to send somebody' wygn-ać 'to expel somebody'

## Patient Noun in -aniec/-eniec

skaz-aniec 'condemned person, convict' wysiedl-eniec 'displaced person' post-aniec 'messenger, courier' wygn-aniec 'exile, outcast'

Similarly, the resultative nouns terminating in $-k(a)$ from (23) could be reanalysed as derived from verbal bases by the addition of the suffix -ankal-onka.

```
Verb
praż-yć 'to roast'
wędz-ić 'to preserve something by smoking'
zapiek-ać'to bake'
```


## Resultative Noun in -onka/-anka

praż-onka 'roasted ore'
wędz-onka 'smoked bacon'
zapiek-anka 'dish baked in oven'
Both approaches are equally plausible and their choice seems to be a matter of one's theoretical underpinnings. Frameworks with an inflection-derivation dichotomy which additionally adhere to the separation of the functional and formal component will find the latter approach more suitable. Adherents to the morpheme-based tripartition approach will opt for inflection feeding derivation. In sum, the data from Polish cannot be used to argue that one approach is superior to the other.

## 3. Participles and departicipial derivatives in Irish

### 3.1. Non-finite verb forms - the verbal noun and the verbal adjective

The Irish language has two non-finite verb forms which in traditional grammars are referred to as the verbal noun (VN) and the verbal adjective (VA) (de Bhaldraithe 1953; Ó hAnluain 1999). The VN is an extremely versatile category, used in a variety of contexts. Among others, it features in the contexts where English uses the infinitive or the present participle to express the progressive. The form ól in (27) is the VN of the verb ól 'drink'. Despite surface homonymy each category is identifiable in the syntactic context (Bloch-Trojnar 2006: 59-114). ${ }^{1}$


The inflectional status of the VN is frequently questioned on account of the fact that, according to traditional grammars, it can inflect for case. On closer inspection it turns out, however, that the genitive case of the VN is not a case ending but a positional variant of the present participle (Bloch-Trojnar 2006: 80-90). It should be regarded as a non-finite form since it is obligatorily followed by the following object. To make matters more intricate, this

[^8]form is homonymous with the so-called verbal adjective, i.e. the past participle. Consider the examples in (28) below:

| a. lucht ólta | beorach |
| :--- | :--- | :--- |
| people drink-pres.prt.gen. |  |
| 'beer drinkers' |  |$\quad$| Genitive case of VN |
| :--- |
| (Present Participle) |

These two forms are in the focus of our attention. Their formation is fairly regular and predictable on the basis of the phonological properties and conjugation class of the base verb and involves either the suffix -ta/te or -tha/the (Ó hAnluain 1999; Bloch-Trojnar 2006: 83). The formal overlap is not complete since the positional variant of the present participle is not equivalent with the past participle in the case of -áil VNs such as pábháil 'pave-VN', whose VN genitive is formed by the addition of depalatalising $-a$, and not $-t e$ :
(29)

[^9]Genitive case of VN
(Present participle)

Verbal Adjective
(Past participle)

As mentioned above, the present participle is obligatorily followed by a modifying object NP , and this structure is equivalent to a construction with the infinitive, as in (30b) below:
(30) a. lucht ólta poitín
people drink-pres.prt.gen. poteen-gen.
'people drinking poteen'
b. lucht poitín a ól
people poteen-acc. PRT drink-VN
'people drinking poteen'
In what follows we will propose alternative analyses for a range of derivational categories identified as based on inflection in Bloch-Trojnar (2015).

### 3.2. Derivatives based on the present participle

### 3.2.1. Adjectives of tendency and inclination (subjective) based on the present participle

It is not uncommon cross-linguistically for present participles to undergo conversion into, or to serve as the base for, adjectives. The adjectives in question are active adjectives or adjectives of tendency and inclination (subjective) as in, for example the sleeping beauty and a very/rather/more/less interesting task respectively (Borer 1990; Beard 1995: 196, 321). Notably
not all deverbal adjectives coincide in form with the present participle (cf. productive, repentant, complimentary in (2) above). We have seen that in Polish, there is a formal distinction between derived 'subjective' adjectives and present participles, e.g. plemię wędrowne 'wandering tribe', where wędrow-ne is formally distinct from wędruj-ące 'wandering, pres.prt' (Szymanek 2010: 103). However, present participles can undergo conversion into adjectives, as in napój chłodzący 'cooling drink' or bomba burzaca 'demolition bomb’ (Cetnarowska 1999: 173). The transposition of a verb to an adjective may be accompanied by a range of additional semantic characteristics relating to such modal concepts as possibility or ability, and concepts expressed in the paraphrase by adverbial modifiers such as constantly, easily, much (Szymanek 2010: 101-103), e.g. kochliwy 'somebody who falls in love easily, frequently'.

Deverbal adjectives belonging to this category in Irish bear a formal resemblance to the variant of the active participle used to modify nouns. The base is, for all intents and purposes, a form terminating in $-t(h) a /-t(h) e$. We cannot treat them as derivatives related to passive participles on account of their active semantics, i.e. they have a potential rather than a resultative tinge. Consider the examples in (31):

| Verb, VN | Present Participle |
| :--- | :--- |
| ol 'drink' | olta |
| abair, rá 'say' | ráite |
| braith, brath 'perceive' | braite |
| sáigh, sá 'stab, thrust' | sáite |
| loit, lot 'hurt, injure' | loite |
| mol, moladh 'praise' | molta |

Adjective of inclination
óltach 'addicted to drink'
ráiteach 'talkative, garrulous'
braiteach 'perceptive'
sáiteach 'thrusting, stabbing, intrusive'
loiteach 'injurious, damaging'
moltach 'laudatory, given to praise'

The suffix -(e)ach does not compete with other markers. The resulting adjective is semantically equivalent to the active participle form used to modify a noun, but distinct formally, e.g.
a. Ní duine moltach mé. 'I am not given to praise.'
b. amhráin molta báid 'a song in praise of boats'

The question to be resolved here is whether we are dealing with derivation making use of an inflected verb form as the base or the derivation from the verbal base by means of the suffix $t(e) a c h / t h(e) a c h$ rather than $-(e) a c h$ which is added to the participle form. Let us recall that that positional variants of VNs in -áil are formed by means of -a (cf. (29) above). Consider some examples of corresponding adjectives in (33) below:
(33) Verb/VN
righneáil 'linger, lingering'
buaiceáil 'showing off; swagger'
gloinceáil 'rocking, swaying'
bóisceáil 'boasting'
póitreáil 'gormandizing'
gleotháil 'making a noise, fussing'

Present Participle
righneála
buaiceála
gloinceála
bóisceála
póitreála
gleothála

## Adjective of inclination

righneálach 'lingering, loitering, dawdling'
buaiceálach 'swaggering, swanky'
gloinceálach 'rocking, swaying, unsteady'
bóisceálach 'boastful'
póitreálach 'gormandizing'
gleothálach 'noisy, fussy'

If we recognize the positional variant of the present participle as the base for adjectives of inclination our analysis will be more elegant, since all adjectives will uniformly be derived by means of the suffix -(e)ach. If we opt for the verbal root as the base we would have to postulate two allomorphs (i.e. $-t(e) a c h / t h(e) a c h$ and $-(e) a c h)$ whose distribution is morphologically conditioned.

### 3.2.2. Agent nouns based on the present participle

It is not uncommon cross-linguistically to form Agent nouns from present participles. For example, in French the present participle resist-ant(e) related to the verb resist-er 'resist' is interpreted as 'resisting/resistance fighter' (Beard 1995: 314). In Polish, present participles may also be converted into agents, e.g. przewodniczacy 'presiding over' $\rightarrow$ przewodniczacy 'chairperson' (Cetnarowska 1999: 175). The same is true of German, e.g. reisen 'travel' $\rightarrow$ reisend 'travelling' $\rightarrow$ der Reisende 'traveller'. In line with this cross-linguistic tendency and counter to Doyle (1992) who proposes to derive Agent nouns from VNs and genitive forms of VNs, in Bloch-Trojnar (2008) I analyse Agent nouns as based on the verbal root and the present participle, as shown in (34a) and (34b) respectively.

| a. Verb (citation form) | Verbal root |  | Agent Noun |
| :---: | :---: | :---: | :---: |
| tosnaigh 'begin' | tosn- |  | tosnóir |
| foghlaim 'learn' | foghlaim- |  | foghlaimeoir |
| scar 'spread' | scar- |  | scaradóir |
| figh 'weave' | fí- |  | fíodóir |
| b. Verb (citation form) | Verbal root | Present Participle | Agent Noun |
| buail 'thresh' | buail- | buailte | buailteoir |
| nigh 'wash' | ní- | nite | niteoir |
| ceannaigh 'buy' | ceann- | ceannaithe | ceannaitheoir |
| imir 'play' | imir- | imeartha | imearthóir |
| bácáil 'bake' | bácál- | bácála | bácálaí |

The availability of two bases often results in derivational doublets, variants which do not contrast in meaning and so can be used interchangeably. ${ }^{2}$ Consider some examples in (35).
(35)

## Verb

teilg 'throw'
maslaigh 'insult'
fiosraigh 'inquire about'
ciontaigh 'blame, accuse'
fostaigh 'employ'
foirgnigh 'build'
imir 'play'
réab 'tear, rend'

## Agent nouns

teilgeoir / teilghtheoir
maslóir / maslaitheoir
fiosróir / fiosraitheoir
ciontóir / ciontaitheoir
fostóir / fostaitheoir
foirgneoir / foirgnitheoir
imreoir / imearthóir
réabóir / réabthóir

[^10]Whereas in Polish there is conversion (or alternatively derivation with the aid of the suffix homonymous with the participial marker), in Irish, the agentive suffix can be added to the root or to what appears to be an inflectional form.

### 3.2.3. The past participle - adjective conversion

Participles, apart from combining with verbs, as in (28b) above, may be used like adjectives. They may be used predicatively, as shown in (36a) and attributively to postmodify a noun, as demonstrated in (36b) below.

| Verb | Past participle = VA | Adjective |
| :--- | :--- | :--- |
| a.dóigh 'burn' | dóite | Is dóite an blas atá air. <br> 'It has a bitter/burning taste.' |
| caill 'lose, perish' | caillte | Tá mé caillte leis an ocras. <br> 'I am perished with hunger.' |
| b. bris 'break' | griste <br> glan 'clean' <br> críochnaigh 'finish' | galla briste 'broken wall' <br> glanta <br> críochnaithe |

The past participle undergoes conversion into a resultative passive adjective. That we are, indeed, dealing with adjectives is confirmed by their ability to form corresponding adverbs. Adverbs are normally formed by putting the particle go in front of the adjective, e.g. maith 'good' - go maith 'well' (Doyle 2001: 37).

| Verb, Past prt | Adjective |
| :--- | :--- |
| oscail, oscailte 'open' | fuinneog oscailte <br> 'open window' |
| múin, múinte 'teach' | páistí múinte <br> 'well-taught children' |

> Adverb
> Dúirt sé go hoscailte é.
> 'He said it openly'
> labhairt go múinte
> 'to speak civilly'

Since adverbs are formed analytically, we cannot say that departicipial adjectives serve as input for further derivation. However, departicipial adjectives can be prefixed with dea- 'good, well' as in, ordaigh, ordaithe 'order, pprt.' - dea-ordaithe 'well-ordered', líon, líonta 'fill, pprt.' - dea-líonta 'well-filled', cum, cumtha 'form, shape, pprt.' - dea-chumtha 'well-shaped, shapely'. Adjectives resulting from the conversion of past participles also sporadically give rise to names of patients and objects/results. Names related to adjectives do not have to be deverbal, e.g. plait 'bare patch' - plaiteach 'patchy, bold' - plaiteachán 'bold person', írtha 'angry, mad, deranged' - iorthachán 'deranged, mad person'. Hence, it is plausible to regard names of patients as derived from adjectives and not directly from participles, e.g. cloígh, cloite 'wear down, subdue, pprt.' $\rightarrow$ cloíte 'worn down, subdued' $\rightarrow$ cloiteachán 'weak, subdued person, mean-spirited person'. Another marginal class that can be formally and semantically related to adjectives resulting from the conversion of perfective participles are resultative nominalisations, which are marked with a variety of formatives such as -óg, -as, -án, e.g. gearr, gearrtha 'cut, pprt' $\rightarrow$ gearrtha 'cut' $\rightarrow$ gearrthóg 'cutting, snippet, cutlet'. Deadjectival

Nomina Essendi are formed from adjectives with the aid of various suffixes (Doyle 1992), e.g. -(e)acht liath 'grey' - liathacht 'greyness'. Adjectives resulting from the conversion of perfect participles act as bases for the derivation of such abstract nouns, e.g. cas, casta 'twist, pprt.' $\rightarrow$ casta 'twisted, wound' $\rightarrow$ castacht 'complexity, intricacy', caith, caite 'spend, consume, pprt.' $\rightarrow$ caite 'worn, consumed, spent' $\rightarrow$ caiteacht 'thinness, emaciation', suigh, suite 'sit, situate, pprt.' $\rightarrow$ suite 'situated, fixes' $\rightarrow$ suiteacht 'fixity, stability', sábháil, sábháilte 'save, pprt.' $\rightarrow$ sábháilte 'safe' $\rightarrow$ sábháiltecht 'safeness, safety'.

### 3.2.4. Past participles as bases for facilitative adjective derivation

In addition to adjectives of inclination, verbs may give rise to passive potential or facilitative adjectives, such as readable or manageable in English. Like in English, in Polish a derived 'objective' adjective is also distinct from a passive participle, e.g. upraw-na ziemia 'arable land' vs. uprawi-ana 'cultivated, pprt'. In Irish, such adjectives are formally related to past participles. The semantics 'that can be done' is expressed by the leniting prefixes $s o^{\mathrm{L}}$ - and $i n^{\mathrm{L}}$-, as exemplified in (38a) and (38b) respectively. The prefix $d o^{\mathrm{L}}-$ in (38c) adds an extra element of negation.

| Prefix | Verb, pprt |
| :---: | :---: |
| a. $s o^{\mathrm{L}}$ - | ceannaigh, ceannaithe 'buy' meal, meallta 'beguile' ceannsaigh, ceansaithe 'appease' |
| b. $\quad i n^{\mathrm{L}}$ - | pós, pósta 'marry' bris, briste 'breakable' caith, caite 'wear' |
| c. $d o^{\mathrm{L}}$ - | inis, inste 'tell, relate' <br> feic, feicthe 'see' <br> smachtaigh, smachtaithe 'control' |

## Passive potential adjective

socheannaithe 'easily bought, venal'
somheallta 'easily beguiled, gullible'
socheansaithe 'appeasable, docile'
inphósta 'marriageable'
inbhriste 'breakable'
inchaite 'wearable, presentable'
do-inste 'undescribable'
do-fheicthe 'undiscernible'
dosmachtaithe 'ungovernable, unruly'

If we accept the participles as the base, again our analysis is more elegant. If we insisted on treating the root as the derivation base we would be dealing with prefixal-suffixal derivation, which is attested nowhere else in Irish.

## 4. Conclusion

In Polish, participles can be interpreted as acting as bases for conversion into adjectives and the formation of Agent nouns and Resultative object nouns. An alternative account where derivational operations target the verbal root and supply suffixes which contain -aqc/-n/-t in their make-up seems equally plausible. The existence of doublets seems to point to a solution where the two routes are simultaneously available.

In Irish, in addition to the expected conversion of participles into adjectives, we can see that agents, adjectives of inclination and passive potential adjectives are formally and semantically related to participles, and are best analysed as being synchronically derived from
them. Other derivatives, such as Resultative nouns, Patientive nominals and Nomina Essendi should be regarded as derived from adjectives which result from the conversion of inflected verbal forms.

Thus, it is the Irish material that poses a problem for approaches which opt for a strict division of labour between derivational and inflectional operations. However, the fact that participles can serve as bases for derived words need not be used as an argument against split morphology. Instead, it may be used as an argument in favour of regarding aspect as a morpholexical category. Stump (2005:52) points out that the terms present and past participle are, in fact, misnomers since participles are uninflected for tense, and they should be regarded as stems conveying aspect information plus the lexical information of the root.

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# A comparison of the modal dać się structure with the dispositional middle in Polish ${ }^{*}$ 

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#### Abstract

The paper compares the modal dać się structure with the dispositional middle in Polish. It is argued that the two structures are similar as regards argument realization, i.e. in both constructions, the theme argument appears in the structural subject position. The two structures also have a dispositional meaning in common. However, they show a number of differences. They differ in the presence of a syntactically active agent, their aspectual properties, the availability of episodic interpretations, the obligatory presence of an adverbial modifier, and verb class restrictions. Although these differences seem to argue against a common syntactic derivation for the two structures analysed here, they do not preclude classifying the modal dać się structure as a subtype of the dispositional middle. If middles are seen as a notional category, understood as a special meaning that different grammatical structures can have, along the lines postulated by Condoravdi (1989), then the modal dać sie structure can be subsumed under the label of middle. In fact, it is argued that the modal dać się structure represents Type II middles in Ackema and Schoorlemmer's (2005) typology, and it shows properties typical of lassen-middles in German (Pitteroff 2014).


Keywords: dispositional middles, lassen-middles, generic interpretation, dispositional meaning, (anti-)causative, implied agent, aspect.

## 1. Introduction

The verb dać 'give' appears in a wide variety of structures in Polish, including ditransitive, causative, impersonal and modal ones. Out of these four configurations, the ditransitive dać 'give' has been most frequently analysed in the literature (cf., for instance, Topolińska 1993, and Citko 2011). The distribution and properties of the remaining three constructions listed above have recently been examined by von Waldenfels $(2012,2015)$ in a corpus study based on the data from Russian, Polish and Czech.

[^11]The aim of this paper is to take a closer look at the structure containing the verb dać 'give', followed by the pronoun sie 'self and the infinitival complement, the so-called modal dać się construction, and compare it with another type of structure, namely the dispositional middle in Polish. Since the modal dać się construction and the middle share a surface syntactic structure and a dispositional meaning, one might be inclined to classify them as belonging to the same category. The comparative study carried out in this paper demonstrates that in spite of a number of common traits, the two constructions under scrutiny exhibit some distinct syntactic properties that cast doubt on a uniform syntactic treatment of the two structures. However, on the grounds of a common dispositional meaning that these structures exhibit, it is possible to classify them as belonging to the middle category, understood in notional terms, along the lines of Condoravdi (1989).

Although the syntactic properties of the modal dać się structure and the dispositional middle are examined here in detail, we do not intend to analyse the derivation of either of them (for an analysis of the syntax of the modal dać się construction, cf. Bondaruk 2015).

The paper consists of five sections. In section 2, the two types of structure to be analysed in the paper are briefly described and characterised. Section 3 focuses on the middle construction from a cross-linguistic perspective in order to prepare the ground for a juxtaposition of the Polish middle and the modal dać się construction, undertaken in section 4. First, in section 4.1, the similarities between the two types of structure are pointed out, mostly relating to their surface syntactic structure, the implied agent, dispositional meaning, and generic interpretation. Subsequently, in section 4.2, the focus is on the differences between the two constructions concerning their aspectual properties, the availability of the agent, the optionality of the adverb, and verb class restriction. Section 5 provides the conclusions.

## 2. The data to be analysed

It has been noted above that the modal dać się structure comprises the verb dać 'give', followed by the pronoun sie, homphonous with the reflexive sie, and the infinitival complement, as demonstrated in (1) below: ${ }^{1}$
(1) Te koszule dają się (łatwo) prać. ${ }^{2}$
these shirts-nom.pl give-3pl się easily wash-inf ${ }^{3}$
'These shirts can be washed easily.'

[^12]Sentence (1) exhibits an inanimate surface subject te koszule 'these shirts', which determines the $\varphi$-features of the verb as the $3^{\text {rd }}$ person, plural, and which corresponds to the theme argument of the verb in the infinitival complement, namely prać 'wash'. ${ }^{4}$ The pronoun sie seems to be identical to the surface subject.

Sentence (1) has a modal meaning, as confirmed by its English translation which contains the modal verb can. The modality involved in (1) is called dispositional and will be elaborated on in Section 4.1.3 below. The brackets around the adverb łatwo 'easily' in (1) imply its optionality. Although the English rendering of (1) makes use of the passive verb form, the verb in the Polish version of example (1) is active, and bears no trace of passive morphology (cf. footnote 1).

The modal structure in (1) seems to be similar to the causative permissive structure, as in (2) below:
(2) Marek daje się (łatwo) zapraszać na przyjęcia.

Mark-nom.sg give-3sg się easily invite-inf to parties
'Mark lets himself be invited to parties.'
In (2) the verb dać 'give', co-occurring with an animate subject Marek 'Mark', has a permissive meaning equivalent to pozwalać 'let'. The difference in meaning notwithstanding, the modal and the causative structures in (1) and (2), respectively, seem to have an identical syntactic surface structure, since both have a verb agreeing in $\varphi$-features with the nominative case marked subject, and they show the pronoun sie co-referential with the subject. The syntactic similarity between the modal and the causative permissive structure will be revisited in section 4.1.3.

Moreover, it is worth pointing out that besides the modal dać się structure as in (1) above, in which the verb agrees with the surface subject, there exists an impersonal modal construction, as in (3):
(3) $\mathrm{Tę}$ koszulę daje się (łatwo) prać. this shirt-acc.sg give-3sg się easily wash-inf 'This shirt can be washed easily.'

In (3) the verb appears in the default $3^{\text {rd }}$ singular form, and the DP that precedes it does not represent a surface subject, but rather a complement of the verb prać 'wash', as it occurs in the accusative, not the nominative case. ${ }^{5}$ However, from the point of view of semantics, (3) is identical with (1), as both of them have a modal meaning, equivalent to a modal verb such as można 'can'.

[^13]The main focus of the paper is on structures such as (1), and reference will be made to the other two constructions in (2) and (3) only when they are relevant to the discussion.

Furthermore, the modal dać się structure in Polish closely resembles an analogous structure found in German, the so-called lassen-middle (the term taken from Fagan 1992, Ackema and Schoorlemmer 2005, and Pitteroff 2014), illustrated in (4) below, taken from Pitteroff and Alexiadou (2012: 214): ${ }^{6}$
(4) Das Auto lässt sich (angenehm) fahren.
the car-nom let-3sg się comfortably drive-inf
'The car drives carefully.'
The only difference between the Polish modal structure in (1) and the German lassenmiddle in (4) lies in the matrix verb itself, which in the former is dać 'give', while in the latter it corresponds to lassen 'let'. Otherwise the two structures are identical as regards the verbal agreement with the nominative case-marked surface subject, the presence of the pronoun sie co-referential with the subject, the infinitival complement in the complement clause, and the theme role of the surface subject with respect to the verb in the infinitive. Actually the similarities between the two structures in Polish and German have made von Waldenfels $(2012,2015)$ conclude that due to the language contact between West Slavic languages and German, the verb lassen had a role to play in shaping the development of the Slavic grammaticalised give. ${ }^{7}$ What is more, the term lassen-middles used in relation to structures such as (4) in German implies their treatment as a subtype of the middle constructions proper. This, in turn, makes one wonder whether the Polish modal dać się structure can be regarded as an instance of the middle construction, and thus justifies a comparison between these two structures undertaken in this paper.

Middle constructions in Polish, like in other languages (cf. section 3 below), represent generic modal statements about the understood object (Lekakou 2005: 10, Ackema and Schoorlemmer 2005: 140), as exemplified in (5):
(5) Te koszule piorą się łatwo. these shirts-nom.pl wash-3pl się easily
'These shirts wash easily.'


6 Marelj (2004: 207) uses the term laten-middles, as she analyses the relevant structure in Dutch, not in German.
7 In fact, van Waldenfels $(2012,2015)$ analyses a much wider range of structures with the verb give in Polish and Czech, including the causative and impersonal structures such as (2) and (3) above, and notes their close resemblance to the corresponding structure in German with the verb lassen. He also mentions that the modal structure with give is only attested in West Slavonic languages, which had contact with German, but not in Bulgarian, Macedonian or East Slavic languages, including Russian, which did not have any contact with German. This makes him conclude that language contact must have been a relevant factor in shaping the West Slavic structures.

In (5) the notional object of prać 'wash' corresponds to the surface subject koszule 'shirts', which is associated with a theme theta role. It is also the surface subject that determines the verbal agreement in (5). Just like the modal dać się structure, introduced above, the middle in (5) contains the pronoun się. The presence of an adverb łatwo 'easily' in (5) is obligatory, in contradistinction with (1), where the manner adverb is just optional. In the middles such as (5) the valency of the verb has been manipulated, i.e. the internal argument is found in the subject position and the external argument is only implied (Levin 1993: 25-26), but is not overtly manifested, which makes this structure similar to the passive. ${ }^{8}$ However, the middle in Polish never shows any passive morphology. ${ }^{9}$ Compare (5) with its passive equivalent in (6):
(6) Te koszule zostały (łatwo) uprane.
these shirts-nom.pl were easily washed
'These shirts were washed easily.'
The passive sentence in (6) contains the auxiliary zostać 'get/become', followed by the passive participle of the verb prać 'wash'. The distinct morphology that the middle and the passive exhibit seems to argue against analysing them in the same way (but see Stroik 1992, 1999, and Hoekstra and Roberts 1993 for an A-movement analysis of both passives and middles).

Moreover, middle constructions such as (5) are sometimes referred to in the literature as dispositional middles (cf. Alexiadou and Doron 2011: 26), as the generalisations they express are true on account of the inherent properties of their subjects (cf. Lekakou 2005). In other words, in the dispositional middle, some property inherent in the subject facilitates the action expressed by the verb (Lekakou 2005), for instance in (5) above, these shirts have some inherent property that makes washing them easy. The term 'dispositional middles' will be used interchangeably with the label 'middles' throughout this paper.

Another structure similar to middles corresponds to anti-causatives (or inchoatives), which typically express a change of state, as in (7) below:
(7) Te koszule uprały się (łatwo).
these shirts-nom.pl washed się easily
'These shirts washed easily.'
In (7), like in (5) above, the valency of the verb has been affected, i.e. the external argument of the verb prać 'wash' is not syntactically represented, and the internal argument surfaces in the superficial subject position. In contradistinction to passives and middles, anti-causatives are normally taken to lack the overt or implied presence of an agent (Levin 1993: 26, Levin and Rappaport Hovav 1995, Reinhart 1996, 2000, 2002. Ackema and Schoorlemmer 2005). However, this claim is contradicted by Polish data such as (8), in which the agent argument is overtly manifested in the form of a dative DP:

[^14](8) Te koszule uprały mi się (łatwo). these shirts-nom.pl washed me-dat się easily 'These shirts washed easily for me.'

Kibort (2004: 183) argues that the dative in sentences such as (8) does indeed correspond to the agent or causer of the action expressed by the verb. The possibility of having an implied agent/causer in anti-causatives makes them similar to middles (as well as passives); the difference between them lies in the fact that middles obligatorily imply an agent, while anticausatives do not (cf. Kibort 2004: 203). Moreover, as has been stated above, middles have a generic meaning, whereas anti-causatives refer to a spontaneous occurrence or an unintentional/accidental/involuntary action (Kibort 2004: 217). Actually, Kibort (2004: 204) argues that middles have the same morpho-lexical structure as anti-causatives, and the two differ from each other only at the level of semantics, presumably in Lexical Conceptual Representations (for a similar view, cf. Ackema and Schoorlemmer 1994). In a similar vein, Schäfer (2008: 220) argues that middles of transitive verbs represent generic unaccusatives, since, as first observed by Hale and Keyser (1987), languages make use of identical morphological marking in the case of middles and unaccusatives. In Schäfer's (2008) account the middle formation is parasitic on unaccusatives, which makes it possible to derive middles in the syntax, without resorting to any lexical operations specific to middle formation (cf. Fagan 1992, Ackema and Schoorlemmer 1994, 2005, Marelj 2004).

Since our main goal in this paper is to compare the modal dać się structure with the dispositional middle in Polish, we remain agnostic as to whether the derivation of middles in Polish takes place in the lexicon or in the syntax proper.

## 3. Two types of middles from a cross-linguistic perspective

Since middles constitute a point of reference against which the properties of the modal dać sie structure can be established here, and since the lassen-middle in German (cf. (4) above) bears a close resemblance to the Polish modal dać się structure, it seems worthwhile to briefly examine the properties of the middle construction itself. The cross-linguistic perspective adopted in this section is meant to bring forth the complexity surrounding this construction and the futility of any attempt at its uniform characterization.

In the literature, two types of middle have been distinguished (cf. Marelj 2004, Lekakou 2005, Ackema and Schoorlemmer 2005). Type I middles do not allow a syntactically active Agent, lack passive morphology, require adverbial modification, and show lexical restrictions on the verbs that can be found in the middle sentence. Middles of Type I are attested in English, Dutch and German. The properties of Type I middles are listed in (9) below, reproduced after Ackema and Schoorlemmer (2005: 133):
(9) a. The external argument of the non-middle counterpart of the middle verb cannot be expressed as a regular DP-argument in the middle.
b. If the non-middle counterpart of the middle verb has a direct internal argument role, the subject of the middle sentence carries this role.
c. The middle verb is stative, non-episodic. The middle sentence is a generic statement. It expresses the fact that the argument mentioned in (b) has a particular individual-level property, or that events denoted by the verb or the verb-argument combination have a particular property in general.

The statements in (9a) and (9b) relate to the argument realization in the middle construction, while (9c) concerns the semantics of the middle. (9a) and (9b) specify what has already been shown in section 2 in relation to Polish middles, namely the fact that the internal argument typically surfaces in the syntactic subject position in the middle construction, whereas the agent argument is not overtly present. Turning to (9c), in addition to the generic character of the middles, it also stresses their stative aspectual nature and the fact they ascribe a property to their subject. Both the syntactic and semantic properties listed in (9) for Type I middles will be tested against the modal dać się structure in section 4 below.

Type II middles, on the other hand, show the opposing characteristics; they do have a syntactically active implicit agent, the adverbial modification is not obligatory, in many languages they are morphologically identical with the passive (for instance, in Greek and Italian), they place less stringent restrictions on the verb, and can have an episodic meaning. Type II middles can be found in Greek, Italian, French, and Serbo-Croatian.

Ackema and Schoorlemmer (2005: 154) observe that Type I middles are parasitic on simple active structures, whereas the occurrence of Type II middles depends on the availability of the reflexive-marked passive construction. ${ }^{10}$ Pitteroff (2014:30) argues that the split between Type I and Type II middles, briefly characterised above from a cross-linguistic perspective, has its language internal manifestation in German. For him, German canonical middles represent Type I, whereas lassen-middles, as in (4), belong to Type II. ${ }^{11}$ In section 4.3, an attempt will be made to confront Pitteroff's (2014) claim with the Polish dispositional middle and the modal dać się structure.

The lack of uniform syntactic behaviour within the class of middles attested in various languages mentioned above seems to support the conclusion drawn by Lekakou (2005: 50) that "there is no cross-linguistically coherent syntactic sense of the 'middle"'. This conclusion basically accords with Condoravdi's (1989) claim that the middle is a notional category which is associated with a particular interpretation, but not with any specific syntactic structure.

## 4. The modal dać się structure vs. the dispositional middle construction

The conclusion reached at the end of section 3 points towards the non-uniform nature of the class of dispositional middles, cross-linguistically. This, in turn, might indicate that in Polish the term 'middle' may likewise refer to a wider range of data than pointed out in section 2. The main objective of this section is to check whether the modal dać się construction can be regarded as a subtype of dispositional middles. First, in section 4.1, some similarities between the two structures under scrutiny will be mentioned, while in section 4.2 the differences between them will be analysed. Finally, in section 4.3 an attempt will be made to determine

[^15]whether the differences that the two structures show exclude the possibility of subsuming the modal dać się structure under the label of dispositional middles in Polish.

### 4.1. Similarities between the modal dać się structure and the dispositional middle in Polish

The modal dać się structure and the Polish dispositional middle exhibit a number of similarities, which concern argument realization (cf. section 4.1.1), the implied agent (cf. section 4.1.2), dispositionality (cf. section 4.1.3), and generic interpretation (cf. section 4.1.4).

### 4.1.1. Argument realisation

The first similarity between the two structures under consideration, already apparent from the overview of the data in section 2, relates to argument realisation. As noted in section 3, middles cross-linguistically show the understood internal argument in the surface subject position. This argument realisation can be found in both Polish dispositional middles and the modal dać się structure. In both (10) and (11) below, which instantiate the dispositional middle and the middle dać się structure, respectively, the theme argument, i.e. te ksiaqżki 'these books', surfaces as the subject:
(10) Te książki czytają się łatwo. ${ }^{12}$
these books-nom.pl read-3pl się easily
'These books read easily.'
(11) Te książki dają się (łatwo) czytać
these books-nom.pl give-3pl się easily read-inf
'These books can be read easily.'
In dispositional middles and the modal dać się structure, the understood object acts as the subject, as it bears the nominative case and triggers verbal agreement (cf. (10) and (11)).

### 4.1.2. Implied agent

It has been noted in section 2 that dispositional middles have an implied agent. The question is whether the modal dać się structure is similar in this respect. In order to test this, let us make use of the test proposed by Fellbaum (1986) and used in relation to German by Pitteroff (2014: 33-4). The test involves the use of a modifier such as łatwo 'easily', whose occurrence is linked with the semantic presence or absence of an agent. In (10) and (11) above, the modifier tatwo 'easily' is found, and in both cases the meaning is the same, i.e. 'One does not have to put much effort into reading these books'. ${ }^{13}$ This, in turn, indicates that both dispositional

[^16]middles, as in (10), and the modal dać się structure, as in (11), show the semantic presence of an agent.

Additionally, Marelj (2004), following Siloni (2003), argues that the instrument role is available only if the explicit or implicit subject is present. When applied to the dispositional middle and the modal dać się structure, the test, based on the instrument theta role, indicates the presence of an implied subject in both these structures, as confirmed by (12) and (13) below:
(12) Ta koszula łatwo się prasuje żelazkiem na parę. this shirt-nom easily się irons iron-inst for steam 'This shirt irons easily with a steam iron.'
(13) Ta koszula daje się (łatwo) prasować żelazkiem na parę. this shirt-nom gives się easily iron-inf iron-inst for steam 'This shirt can be ironed easily with a steam iron.'

Both (12) and (13) are licit with the instrument phrase żelazkiem na pare 'with a steam iron', which serves as evidence for the presence of an implied subject in the two structures under scrutiny.

The question of whether the agent is syntactically present in both structures analysed here is more difficult to answer. Let us first note that both dispositional middles and the modal dać się structure can host a dative nominal, in a way similar to anti-causatives such as (8) above, as confirmed by (14) and (15) below:
(14) Te samochody prowadzą się łatwo nawet niedoświadczonym kierowcom. these cars-nom.pl drive-3pl się easily even inexperienced drivers-dat 'These cars drive easily even for inexperienced drivers.'
(15) Te samochody dają się (łatwo) prowadzić nawet niedoświadczonym kierowcom. these cars-nom.pl give-3pl się easily drive-inf even inexperienced drivers-dat 'These cars can be driven easily even by inexperienced drivers.'

In both (14) and (15) the dative DP is not a beneficiary, but an agent. In the literature dative DPs like the one in (14) are taken to represent involuntary agents/experiencers which are
(i) Drzwi otwierają się łatwo. door-nom.pl open-3pl się easily
'The door opens easily.'
(ii) Drzwi łatwo się otwierają. door-nom.pl easily się open-3pl 'The door opens easily.'

Sentence (i) can have the following paraphrase: 'The door opens without any effort', while (ii) has a different meaning, namely: 'The door opens by itself. However, the difference in the placement of the adverb in (10) and (11) above does not result in any difference in meaning. Cf. also (iii) below with (i) and (ii):
(iii) Drzwi dają się łatwo otworzyć.
door-pl give-3pl się easily open-inf
'The door can be opened easily.'
The only interpretation available for (iii) is as follows: 'The door can be opened without any effort'.
"unable to control the way the eventuality develops" (Rivero et al. 2010: 707). ${ }^{14,15}$ The dative DP, as in (14) above, corresponds to a for-phrase, attested in English middles (cf. Ackema and Schoorlemmer 2005: 136), such as (16) below:
(16) The bread cuts easily for John. (Kit 2014: 4)

The complement of the for-phrase in (14) functions as an experiencer which does not actively cause the event to happen (cf. Hoekstra and Roberts 1993, Kit 2014), and thus closely resembles the dative DP used in (14). Dative DPs, as in (14), can be found in a number of syntactic structures in Polish, including impersonals, anti-causatives (cf. (8) above), transitives, and unergatives. Involuntary agents are analysed as specifiers of a high applicative head, postulated by Pylkkänen (2008) (Rivero et al. 2010, Frąckowiak and Rivero 2011, Krzek 2013). ${ }^{16}$ A different account of dative nominals in dispositional middles such as (17) below, can be found in Cichosz (2014).
(17) Jankowi te teksty łatwo się tłumaczą. (Cichosz 2014: 40)

John-dat these texts-pl easily się translate-3pl
'To John, these texts translate easily.'
Cichosz (2014) argues that the dative in (17) can be interpreted as an involuntary (out of control) agent of the action, as well as a beneficiary. She suggests that the dative DP is generated high, in contradistinction to beneficiary dative DPs. For her, high datives are adjuncts adjoined to TP. Her analysis predicts that high datives, being TP-adjuncts, should be possible either in the sentence initial or final position. This claim, however, is problematic in the light of the data such as (18) below, where the dative appears in the clause medial position:
(18) Te samochody wszystkim prowadzą się łatwo. these cars-nom.pl everyone drive-3pl się easily 'These cars drive easily for everyone.'

In (18) the dative DP wszystkim 'everyone' corresponds to the agent of driving, but it cannot be taken to represent a high dative, which makes Cichosz's (2014) account untenable. No problem of this kind arises in the high applicative approach, as a high applicative head can be merged within the VP, as originally proposed by Pylkkänen (2008).

As for the dative DP in (15), it does not seem to correspond to an involuntary agent/experiencer, but rather stands for a genuine agent which actively causes the event of driving. This is different from the corresponding middle in (14), and hence calls for a different syntactic treatment. The problem of the syntactic representation of an implicit agent in both of the structures under consideration is addressed in section 4.2.2.

[^17]
### 4.1.3. Dispositional meaning

The dispositional meaning, which is typical of middles, has already been pointed out in section 2, and has been frequently taken to be a distinctive properly of this structure (Fagan 1992, Ackema and Schoorlemmer 2005, inter alia). To recall, the dispositional meaning involves the ascription of a property to a subject which holds by virtue of an inherent property that the subject has (Lekakou 2005, Pitteroff 2014: 42). According to Lekakou (2005) and Menéndez-Benito (2013), dispositional readings arise in the presence of a covert possibility modal that selects for a particular type of circumstantial modality (Kratzer 1991). The middle in (19) below has a dispositional meaning, which can be paraphrased as in (20):
(19) Te podłogi czyszczą się łatwo. these floors-nom.pl clean-pl się easily 'These floors clean easily.'
(20) by virtue of the material they are made of, the floors clean easily

Likewise, the corresponding modal dać sie structure, provided in (21), gives rise to a dispositional reading depicted in (20) above.
(21) Te podłogi dają się (łatwo) czyścić. these floors-nom.pl give-pl się easily clean-inf 'These floors can be cleaned easily.'

However, in addition to the dispositional meaning, (21) can also have a permissive meaning, which surfaces in the continuation of (21), provided in (22) below: ${ }^{17}$
(22) bo mamy dobre środki czyszczące.
because we-have good agents cleaning
'because we have good detergents.'
(22) sounds slightly better as a continuation of (21) if the manner adverb in (21) is missing (cf. Gehrmann (1983: 12), who notes that the dispositional meaning is enforced by the presence of an adverb, although this is just a tendency, not a regularity, as noted by von Waldenfels 2012:163). Nonetheless, (22) sounds totally degraded as a continuation of the middle structure in (19). This clearly shows that the middle can have just a dispositional meaning, while the modal dać się structure can convey a dispositional, as well as a permissive meaning. The ambiguous character of the modal dać sie structure has also been noted by von Waldenfels (2012: 162-164).

### 4.1.4. Generic interpretation

Middles are considered to be generic, and therefore they express regular occurrences, rather than specific events (Keyser and Roeper 1984, Condoravdi 1989, Marelj 2004, Lakakou 2005,

[^18]among others). Genericity is also a property of Polish middles, as confirmed by the fact that they lack an actuality entailment, in contradistinction to episodic statements. The difference is apparent when we compare sentences (23) and (24) below (a similar test is used for lassenmiddles by Pitteroff 2014: 38):
(23) Te podłogi czyszczą się łatwo, ale jeszcze nikt ich nie czyścił. these floors-nom.pl clean-pl się easily but yet nobody them not cleaned 'These floors clean easily, but nobody has cleaned them yet.'
(24) Ewa wyczyściła podłoge, \#ale podłoga nie została wyczyszczona. Eve cleaned floor but floor not was cleaned '\#Eve cleaned the floor, but the floor hasn't been cleaned.'

The continuation added after the comma in (24) results in the sentence being incongruous, whereas the middle construction in (23) can be so continued without giving rise to a contradiction. This indicates that the actuality entailment is absent in middles, in contradistinction to active sentences, which, in turn means that the former can be classed as generic statements.

The modal dać się structure patterns in the same way as middles as regards the actuality entailment, as demonstrated in (25):
(25) Te podłogi dają się (łatwo) czyścić, ale jeszcze nikt ich nie czyścił. these floors-nom.pl give-pl się easily clean-inf but yet nobody them not cleaned 'These floors can be cleaned easily, but nobody has cleaned them yet.'

The grammaticality of (25) indicates the lack of actuality entailment in the modal dać sie structure, which proves its generic nature.

However, the modal dać się structure, similarly to lassen-middles in German (cf. Ackema and Schoorlemmer 2005: 144, but contra Pitteroff 2014: 39) can also have an episodic interpretation, as in (26) below:

| Te | problemy | daly | się | (łatwo) | rozwiązać | w | 10 | minut. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| these | problems-nom.pl | gave-pl | się | easily | solve-inf | in | 10 | minutes |
| 'These problems could be solved easily in | 10 | minutes.' |  |  |  |  |  |  |

The grammaticality of (26) indicates that the modal dać się structure can give rise to an episodic meaning, in contradistinction to the middle construction, which never allows this interpretation. The middle version of (26), provided in (27), is unacceptable:

(27) becomes acceptable if we drop the adverb łatwo 'easily', and then the structure becomes unaccusative.

To sum up, the discussion in this section has shown that the middle construction is always generic. The modal dać się structure clearly contrasts with the middle in that it can also be associated with an episodic meaning.

### 4.2. Differences between the modal dać się structure and the dispositional middle in Polish

In this section the focus is on the most important differences between the two structures analysed here, which include aspect (section 4.2.1), availability of a syntactically represented agent (section 4.2.2), verb class restrictions (section 4.2.3), and the presence of an adverb (section 4.2.4). However, before analysing each of these differences in detail, let us note the most noticeable difference between the middle and the modal dać się structure. The difference relates to the number of verbs, i.e. the latter contains an additional predicate dać 'give', whereas the former exhibits just one predicate. The verb dać 'give', as has already been noted in section 2 , takes an infinitival verb as its complement.

### 4.2.1. Aspect

In the literature, middles are regarded as stative (Keyser and Roeper 1984, Condoravdi 1989, Fagan 1992, Ackema and Schoorlemmer 2005, among others). Pitteroff (2014:36) argues that German lassen-middles are also stative. Let us check whether Polish dispositional middles and modal dać się structures can also be treated as stative. Dispositional middles such as (10), repeated for convenience below as (29), cannot be used to answer the question in (28) below, which supports their stative nature:
(28) Co się teraz dzieje? what się now happens 'What is happening now?'
(29) Te książki czytają się łatwo. these books-nom.pl read-3pl się easily 'These books read easily.'

However, the aspectual properties of the modal dać się structure as in (11), repeated for convenience in (30) below, are different. When used in an appropriate context, such as (31) below, sentence (30) can be a possible answer to the question in (28).
(30) Te książki dają się (łatwo) czytać these books-nom.pl give-3pl się easily read-inf 'These books can be read easily.'
(31) Te książki były zaszyfrowane, ale właśnie złamaliśmy kod i teraz te książki dają się (?łatwo) czytać. 'These books were encrypted, but we have broken the code, and now the books can be read (easily).'

This time, there is no difference in aspectual properties, depending on whether the adverb is present or not (although the version with the adverb is slightly degraded, as signaled by the question mark next to the adverb in (31)). Both versions in (30), with and without the adverb, can be used as an answer to the question in (28), which argues against the stative nature of the modal dać się structure in Polish.

Moreover, dispositional middles in Polish are incompatible with specific time adverbials, as can be seen in (32) below: ${ }^{18}$

$$
\begin{array}{llllllll}
\text { \#Te książki } & \text { czytają } & \text { się łatwo } & \text { o } & \text { czwartej } & \text { rano. }  \tag{32}\\
\text { these books-nom.pl } & \text { read-3pl } & \text { się } & \text { easily } & \text { at } & 4 & \text { a.m. } \\
\text { '\#These books read easily at 4 am.' } & & & &
\end{array}
$$

However, this kind of modification is tolerated in the modal dać się structure, no matter whether the adverb is present or not. This is shown in (33) below:
(33) Te książki dają się (?łatwo) czytać o czwartej rano. these books-nom.pl give-3pl się easily read-inf at 4 a.m. 'These books can be read easily at 4 a.m.'

In (33) the modification by the time adverbial is perfectly licit, and (33) is only slightly worse when the manner adverb is present. The grammaticality of (33) and the semantic illformedness of (32), once again, show that the aspectual properties of the modal dać sie structure and the dispositional middle are different in Polish. Whereas the latter is always stative, the former does not have to be so.

### 4.2.2. Availability of the agent

It has been stated in section 3 that dispositional middles of Type 1, cross-linguistically, do not have any syntactically active agent. The evidence used to support this claim relies on the presence of the $b y$-phrase, agent oriented adverbs, and control into infinitival adjunct clauses (cf. Marelj 2004, Ackema and Schoorlemmer 2005, among others). Since the test based on control does not seem to point towards the actual syntactic presence of the subject, as extensively argued by Marelj (2004: 121-124), but rather serves to prove that the implicit subject is semantically active, it is taken to be unreliable in establishing the syntactic presence of the subject. Consequently, only the first two tests mentioned above will be applied to the two Polish structures under consideration in order to look for the similarities and differences they might show as regards the syntactic presence of the agent argument.

[^19]First of all, dispositional middles in Polish cannot co-occur with the przez 'by'-phrase, while this kind of phrase can be found in the modal dać się structure, as confirmed by (34) and (35) below:

| $*$ Te | zadania | rozwiązują | się | latwo | przez | dobrych | uczniów. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| these | tasks-nom.pl | solve-pl | się | easily | by | good | pupils |
| ‘These tasks solve easily by good pupils.' |  |  |  |  |  |  |  |

(35) Te zadania dają się (łatwo) rozwiązać przez dobrych uczniów. ${ }^{19}$ these tasks-nom.pl give-pl się easily solve-inf by good pupils 'These tasks can be solved easily by good pupils.'

The availability of the przez-phrase in the modal dać się structure has also been noted by von Waldenfels (2012: 164), who has found six instances of the modal structure with the agentive przez 'by'-phrase in the National Corpus of Polish. The grammaticality contrast between (34) and (35) allows us to draw the conclusion that whereas the agent must be syntactically absent in the middle construction in Polish, it must be present in the modal dać się structure. The presence of a syntactically represented agent in the modal dać sie structure makes Polish similar to German, in which lassen-middles can also co-occur with the agentive by-phrase (Pitteroff 2014: 47).

Secondly, the so-called agentive adverbs, i.e. adverbs which in Vendler's (1984) classification 'posit some trait in the Agent', such as deliberately/intentionally cannot be used in middles. When tested against the Polish data under scrutiny, the test shows that agentive adverbs are disallowed in the Polish middle construction, as in (36), while they are tolerated in the modal dać się structure, as in (37) (example (37) has been modeled on Pitteroffs (2014: 198) example $\left.(50)^{20}\right)$ :
(36) ${ }^{*} \mathrm{Te}$ klątwy rzucają się tylko świadomie. these spells-nom.pl cast-pl sie only deliberately ${ }^{*}$ These spells cast only deliberately.'
(37) Te klątwy dają się rzucać tylko świadomie. these spells-nom.pl give-pl się cast-inf only deliberately 'These spells can be cast only deliberately.'

[^20]The possibility of having an agent-oriented adverb świadomie 'deliberately' in a modal structure such as (37), and its impossibility in a middle construction such as (36) indicate that an agent is syntactically present in the former, but is absent in the latter structure.

To recapitulate, the by-phrase test and the test based on agentive adverbs yield contrasting results for the dispositional middle and the modal dać się structure, which allows us to draw the conclusion that the former structure lacks a syntactically represented agent (but cf. Golendzinowska (2004: 110), who argues that Polish middles have a null agentive argument syntactically represented as pro), while the latter type of structure has an agent active in the syntax.

### 4.2.3. Verb class restrictions

In the literature, there is a lot of discussion as regards the verb classes which allow the middle formation (cf., for instance Ackema and Schoorlemmer 2005). Fagan (1992) argues that only accomplishments (e.g. read, sell, cross, break, etc.) and activities (e.g. drive, run, play, push, smoke, etc.) in the sense of Vendler (1967) are compatible with the dispositional middle, while achievements (e.g. recognize, realize, lose, find, etc.) and states (e.g. like, love, hate, possess, have, etc.) are not.

When tested against the Polish data, the claim that achievement verbs cannot participate in the middle formation turns out to be problematic, as can be seen in (38):
(38) Te klucze gubią się łatwo. these keys-nom.pl lose-pl się easily 'These keys get lost easily.'

In (38) the verb gubić 'lose' appears, which belongs to the achievement class, but nonetheless it can be used in the middle sentence. However, other achievement verbs cannot be inserted in the middle structure, as can be seen in (39) below:

```
*Te błędy zauważają się łatwo.
    these mistakes-nom.pl notice-pl się easily
    'These mistakes get noticed easily.'
```

Moreover, stative verbs can never be found in dispositional middles in Polish, as exemplified in (40):
(40) *Warszawa lubi się łatwo. Warsaw likes się easily
'*Warsaw likes easily.'
Sentence (40) is ungrammatical, as the stative verb lubić 'like' cannot participate in the middle formation.

In contradistinction to the Polish dispositional middle, the modal dać się structure does not seem to obey the lexical restrictions mentioned above. Both achievement and state verbs are possible in this type of structure, as can be seen in (41), and (42), respectively:
(41) Te błędy dają się (łatwo) zauważyć. these mistakes-nom.pl give-pl się easily notice-inf 'These mistakes can be easily noticed.'
(42) Warszawa da się (łatwo) lubić.

Warsaw-nom.sg gives się easily like-inf 'Warsaw can be easily liked.'

However, the modal dać się structure is not entirely unrestricted. Firstly, the structure under scrutiny is impossible with some stative verbs such as mieć 'have' or znać 'know', as shown in (43) and (44), respectively:
(43) *Duże dochody dają się (łatwo) mieć.
big income-nom.pl give-pl się easily have-inf
'Big income can be easily obtained.'
(44) *Te języki dają się (łatwo) znać.
these languages give-pl się easily know-inf
'These languages can be learnt easily.'
Secondly, unaccusative verbs can never be found in the modal dać się structure, as confirmed by (45):
(45) ${ }^{*} \mathrm{Te}$ kwiaty dają się (łatwo) zwiędnąć.
these flowers-nom.pl give-pl się easily wither 'These flowers can wither easily.'

Consequently, it seems that the modal dać się structure is subject to lexical restrictions that are different from those attested in the dispositional middles in Polish.

### 4.2.4. Adverbial modification

As has already been noted in section 2, dispositional middles in Polish and cross-linguistically require the obligatory modification by a manner adverb, such as łatwo 'easily', which specifies the way in which the eventuality expressed by the verb can be carried out. ${ }^{21}$ Other possible adverbs include trudno 'with difficulty', dobrze 'well', źle 'badly', etc. In the literature adverbs of this type are treated as those that select a covert experiencer (Roberts 1987, Lekakou 2005). The omission of manner adverbs in the middle construction results in the loss of the dispositional generic interpretation, as can be seen in (46) and (47) below:
(46) Te koszule piorą się źle. these shirts-nom.pl wash-pl się badly 'These shirts wash badly.'

[^21]```
(47) Te koszule piorą się. these shirts-nom.pl wash-pl się 'These shirts are being washed.'
```

Whereas (46) represents a middle sentence, whose meaning can be paraphrased as follows: by virtue of their inherent property these shirts wash badly, (47) refers only to the ongoing event, and means that these shirts are now being washed.

In the modal dać się structure the adverb is always optional, as can be seen in (48) below, and in all of the instances of this structure provided so far (cf. for instance (1), (11), and (15) above).
(48) Te koszule dają się (źle) prać.
these shirts-nom.pl give-pl się badly wash-inf
'These shirts can be washed badly.'
Although the dispositional middle in Polish, like in other languages, is felicitous without an adverb if negation, a modal verb or a focused element is present (cf. Fagan 1992, Ackema and Schoorlemmer 2005, Marelj 2004, Lekakou 2005), none of these modifiers is necessary to make the modal dać się structure licit. Compare the middle in (49) with the corresponding modal structure in (50):
(49) Ta książka nie sprzedaje się. this book-nom.sg not sells się 'This book does not sell.'
(50) Ta książka (nie) daje się sprzedać. this book-nom.sg not gives się sell-inf 'This book cannot be sold.'

Whereas (49) preserves the dispositional generic interpretation only in the presence of negation, (50) is perfectly licit even without negation.

### 4.3. Is the modal dać się structure a subtype of dispositional middles in Polish?

Having presented the main similarities and differences that the modal dać się structure shows in comparison with the dispositional middle in Polish, we can now take stock and determine whether the former can be treated as a subtype of the latter. Out of the four points of convergence between the two structures listed in section 4.1, only the ones concerning argument realization, implied agent and dispositional meaning seem to be valid. The generic meaning, included among the similarities between the two structures, does not seem to actually represent one, as the modal dać się structure can give rise to a generic as well as an episodic meaning, in contradistinction to the middle structure which is always generic. The differences between the two structures relate to 1 ) aspect - stative in the case of middles, but eventive in the modal dać się structure, 2) the syntactic representation of the agent - present in the modal dać się structure, but absent in middles, 3) different verb class restrictions in the two structures analysed here, and 4) modification by the adverb - obligatory in the middle,
but optional in the modal dać się structure. All the differences just listed allow us to draw the conclusion that the two structures differ considerably as regards their syntactic structure. However, as has been noted in section 3 above, following Condoravdi (1989), inter alia, middles tend to form a notional category, i.e. "a special interpretation certain syntactic configurations may give rise to, rather than a distinct grammatical construction" (Pitteroff 2014: 30). If viewed from this perspective, the modal dać się structure, which has a dispositional interpretation, can be treated as a subtype of dispositional middles. In fact, when confronted with the two types of middles, mentioned in section 3, the modal dać się structure seems to show the properties typical of Type II middles, on account of the syntactic presence of an implied agent, the optionality of the adverb, its episodic meaning, and the less stringent restrictions on the verb class than those found in Type I middles. In this respect, the modal dać się structure closely resembles lassen-middles in German, treated by Pitteroff (2014) as Type II middles. The difference that the modal dać się structure shows in comparison with Type II middles is the lack of passive morphology, which is also typical of German lassenmiddles. The modal dać się structure is also often ambiguous between the dispositional and permissive meaning, which might suggest that the two are syntactically similar (a point further developed in Bondaruk 2015)

## 5. Conclusions

The paper has aimed at presenting the syntactic and semantic properties of the modal dać sie structure by comparing it with the dispositional middle in Polish. Since in the literature both dispositional middles and lassen-middles have been treated as members of the class of middles, it seems justified to examine the possibility of conflating these two types of structure in Polish under the same label. It has been argued that the modal dać się structure shows the same argument realization as the dispositional middle, i.e. the presence of the theme argument in the syntactic subject position. Moreover, both structures have the same dispositional meaning. However, it has been demonstrated that there are more differences between the two structures under scrutiny than actual points of convergence. First of all, although both can have an implied agent which is semantically active, only the modal dać się structure has an agent active in the syntax, as well. Secondly, the dispositional middle is stative, in contradistinction to the modal dać się structure, which can be eventive. Thirdly, although both structures can be generic, the modal dać się construction can also be episodic. Fourthly, a restricted set of verbs can appear in dispositional middles, while in the modal dać się structure a wider range of verbs can be found. Finally, the manner adverb modification is indispensable for the middle interpretation to be possible, while the adverb may be missing in the modal dać się construction without affecting its acceptability. Taking all these differences into account, it has been concluded that the two constructions have distinct syntactic structures. However, the dispositional meaning they share makes it possible for them to be subsumed under the label of the middle construction, understood as a notional category, along the lines first postulated by Condoravdi (1989). Within Ackema and Schoorlemmer's
(2005) typology of middles, the dispositional middle in Polish belongs to Type I middles, while the modal dać się structure can be classed as Type II middles.

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# Ad hoc properties and locations in Maltese 

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#### Abstract

This paper aims to show that the four-way BE-system of Maltese can best be accommodated in a theory of nonverbal predication that builds on alternative states, without making any reference to the Davidsonian spatiotemporal event variable. The existing theories of non-verbal predicates put the burden of explaining the difference between the ad hoc vs. habitual interpretations either solely on the non-verbal predicate, by postulating an event variable in their lexical layer (see Kratzer 1995; Adger and Ramchand 2003; Magri 2009; Roy 2013), or solely on the copular or non-copular primary predicate, which contains an aspectual operator or an incorporated abstract preposition, responsible for such interpretive differences (Schmitt 2005, Schmitt and Miller 2007, Gallego and Uriagereka 2009, 2011, Marín 2010, Camacho 2012).

The present proposal combines Maienborn's (2003, 2005a,b, 2011) discourse-semantic theory of copular sentences with Richardson's (2001, 2007) analysis of non-verbal adjunct predicates in Russian, based on alternative states. Under this combined account, variation between the ad hoc vs. habitual interpretations of nonverbal predicates is derived from the presence or absence of a modal $\mathrm{OP}_{\text {alt }}$ operator that can bind the temporal variable of non-verbal predicates in accessible worlds, in the sense of Kratzer (1991). In the absence of this operator, the temporal variable is bound by the $\mathrm{T}_{0}$ head in the standard way. The proposal extends to non-verbal predicates in copular sentences as well as to argument and adjunct non-verbal predicates in non-copular sentences.


Keywords: ad hoc vs. habitual properties, alternative states, accessible worlds, rich structure small clauses, cyclic Agree

## 1. Introduction

This paper ${ }^{1}$ aims to show that the four-way BE-system of Maltese can best be accommodated in a theory of non-verbal predication that builds on alternative states and makes no reference

| 1 | Abbreviation used in the paper: |  |  |
| :--- | :--- | :--- | :--- |
| ABL | ablative case | PAST | past tense |
| ACC | accusative | PiP | functional category licensing |
| AP | adjective phrase |  | $[ \pm$ pred $],[ \pm$ obl $],[ \pm$ phi $]$ features |
| AUX | auxiliary verb | PL | plural |
| COND | conditional mood | POSS | possessive marker |
| COP | copula | PP | prepositional phrase |

to the Davidsonian spatio-temporal event variable (Davidson 1980). The existing theories of non-verbal predication explain the difference between the ad hoc vs. habitual interpretations either by postulating an event variable in the lexical layer of non-verbal predicates (see Kratzer 1995; Adger and Ramchand 2003; Magri 2009; Roy 2013), or by assuming that the copular or non-copular primary predicate contains an aspectual operator or an incorporated abstract preposition, responsible for these interpretive differences (Schmitt 2005, Schmitt and Miller 2007, Gallego and Uriagereka 2009, 2011, Marín 2010, Camacho 2012). ${ }^{2}$

The present proposal combines Maienborn's (2003, 2005a,b, 2011) discourse-semantic theory of copular sentences with Richardson's $(2001,2007)$ analysis of non-verbal predicates in Russian, based on alternative states. Under this combined account, variation between the ad hoc vs. habitual interpretations of non-verbal predicates is derived from a modal $\mathrm{OP}_{\text {alt }}$ operator ${ }^{3}$ that can bind the temporal variable of non-verbal predicates in accessible worlds, in the sense of Kratzer (1991). In the absence of $\mathrm{OP}_{\text {att }}$, the temporal variable is bound by the $\mathrm{T}_{0}$ head in the standard way. In addition to non-verbal predicates in copular sentences, the present proposal extends to argument and adjunct non-verbal predicates in non-copular sentences (Richardson 2001, 2007); it can account for the so-called "life-time effect" of past indicative copular sentences (see Camacho 2012); finally, it can successfully incorporate the four-way BE-system of Maltese.

The paper is organized as follows. Section 2 gives a brief overview of the existing models of non-verbal predication, pointing out some of their problems. Section 3 introduces the fourway BE-system of Maltese. 4.1 offers an "alternative state"-account, without reference to event variables. 4.2 briefly discusses the "rich structure" of non-verbal predication, i.e. small clauses in copular and non-copular sentences. Section 5 is a summary of the paper.

| DAT | dative case | PredP | PredicatePhrase |
| :---: | :---: | :---: | :---: |
| EPS | episodic aktionsart | PRES | present tense |
| ESS | essive case | PsiP | functional category |
| F | feminine gender | SG | singular |
| HABIT | habitual aktionsart | SLP | stage-level predicate |
| ILP | individual level predicate | TP | tense phrase |
| INST | instrumental case | VP | verb phrase |
| M | masculine gender |  |  |
| NOM | nominative case |  |  |
| $\mathrm{OP}_{\text {alt }}$ | alternative operator |  |  |
| The stage-level vs. individual level distinction goes back to Carlson (1980) and is often identified with the temporary vs. permanent property interpretations of non-verbal predicates. However, this contrast can also appear in contexts that have nothing to do with the time span or with the internal temporal organization of the clause (see Richardson 2001, 2007 for Russian non-verbal adjunct predicates and Camacho 2012 for Spanish non-verbal predicates). This lends support to the "alternative state" account proposed here. While the existing "alternative state" accounts (e.g. Beck 2007, Magri 2009) take the ALT or EXH operators to be choice functions in the actual world, the modal $\mathrm{OP}_{\text {alt }}$ introduced here ranges over accessible worlds. |  |  |  |
|  |  |  |  |

## 2. Problems with the existing accounts of non-verbal predication

### 2.1. Current accounts

Non-verbal predicates may express either habitual or ad hoc properties in several languages of the world (see Stassen 1996, 2008). In the vast literature on non-verbal predication, this fact is traditionally accounted for by the presence or absence of a Davidsonian spatio-temporal event variable in the lexical layer of non-verbal predicates (Kratzer 1995; Adger and Ramchand 2003; Magri 2009; Roy 2013). ${ }^{4}$ Under these accounts, the italicized non-verbal predicates in (1a) denote a stage-level property (also called ad hoc or actual property), while the italicized non-verbal predicates in (1b) express an individual level (i.e. habitual or permanent) property (examples from Maienborn 2005a):
(1) a. Carol was tired/hungry/angry in the car. (stage-level property)
b. *Carol was blond/intelligent/tall in the car. (individual level property)

The ungrammaticality of (1b) is derived from the absence of the Davidsonian spatio-temporal event variable, which makes spatial anchoring impossible.

The Kratzer-Diesing model, dubbed here as "the event variable-account" has received considerable criticism in recent years (see Maienborn 2003, 2005a,b; Gallego and Uriagereka 2009, 2011 for a list of arguments), the main source of objection being that it excludes variation between the stage-level vs. individual level interpretations of non-verbal predicates that appear in the same syntactic environment (see Doherty 1996 for Irish; Schmitt 2005 for Portuguese; Schmitt and Miller 2007 for Spanish; Richardson 2001, 2007 and Franks 2014 for Russian). Various proposals have been put forward, either to complement or to replace the classic stage-level vs. individual level distinction proposed by Kratzer (1995). Four of these proposal are briefly discussed below, in particular, (i) the scalar implicature-based account; (ii) the P-incorporation account; (iii) the multi-structure account; and (iv) the Kimian state account.
(i) Magri (2009) proposes a scalar implicature-based explanation of the stage-level/individual level contrast. He argues that predicates denoting stage-level properties trigger a scalar implicature (i.e. they entail a set of alternatives), while predicates denoting individual level properties do not tolerate such scalar implicatures and have no alternative set at all.
(2) ${ }^{\star}$ John is sometimes tall.

Thus, the sentence in (2) is claimed to be ungrammatical because no potential alternative states can be associated with it, hence no scalar implicature is triggered.

[^22](ii) The ser/estar alternation and its correlation with the semantic interpretation of non-verbal predicates in Spanish copular sentences was already noted by Querido (1976), who suggests the following experiment:

Let us assume that there is a botanist somewhere in the Amazonian jungle who has just discovered a tree of a previously unknown species. The leaves of the tree are yellow. How should he report of his findings in Spanish?
(3) a. Las hojas de este árbol son amarillas.
the leaves of this tree are-S yellow.PL
'The leaves of this tree are yellow.' (ser+habitual property)
b. Las hojas de este árbol están amarillas.
the leaves of this tree are-E yellow.PL
'The leaves of this tree are yellow.' (estar+ad hoc property)
The botanist would be condemned to silence until he finds out whether the predicate amarillas 'yellow.PL' refers to an $a d h o c$ or a habitual property.
(Maienborn 2003: 4-5)
Querido (1976: 354) argues that the difference between ser 'be' vs. estar 'be' should be based on direct vs. indirect evidence.

Gallego and Uriagereka $(2009,2011)$ propose a syntactic P-incorporation account of the ser/estar alternation in Spanish. Although there are a great number of non-verbal predicates that denote either a habitual or an ad hoc property ((4a) vs. (4b)), there are many others that may refer to both in the appropriate context. The non-verbal predicate in (5a)-(5b) is equally correct with ser 'be' and with estar 'be' (examples from Camacho 2012: 453-455):
a. Obama es/*está americano.

Obama is-S/is-E American
'Obama is American.' (habitual property)
b. Obama *es/está preocupado.

Obama is-S/is-E worried
'Obama is worried.' (ad hoc property)
(5) a. Alejandro es agradable.

Alejandro is nice
'Alejandro is nice.' (habitual property)
b. Alejandro está agradable.

Alejandro is nice
'Alejandro is nice.' (ad hoc property)
In Gallego and Uriagereka's $(2009,2011)$ model, the ad hoc vs. habitual interpretations are derived from an abstract preposition incorporated in the lexical layer of ser, as a result of which ser gets spelt out as estar:
(6) $\quad$ estar $=\operatorname{ser}+\mathrm{P}($ terminal coincidence)

The variation between ser and estar is conceived here as the manifestation of inner aspect, i.e. Aktionsart (see Camacho 2012 for details).
(iii) Roy (2013) proposes a three-way system of non-verbal predication: in addition to situation-describing (i.e. stage-level) predicates, she further divides individual level predicates into characterizing and defining ones. She associates the three types of non-verbal predicate with three syntactic categories of different projectional complexity: situation-describing nonverbal predicates project as XPs; characterizing non-verbal predicates are ClPs; finally, defining ones are NumPs. As her "multi-structure" approach draws heavily on the "event variable"-account, it will not be discussed here in detail (see Geist 2014 for a review).
(iv) Maienborn (2003, 2005a,b, 2011) introduces a new ontology of eventualities, arguing that neither type of non-verbal predicate passes the traditional eventuality tests because neither contains a Davidsonian spatio-temporal variable, only a Kimian temporal variable.


ABSTRACT OBJECTS
In her discourse-semantic account, the interpretation of small clause predicates is determined either by (i) the temporal dimension or (ii) the spatial dimension or (iii) the epistemic dimension of topic situations.

These three dimensions prove insufficient in the case of dream narratives ${ }^{5}$ and noncopular predicates taking adjunct small clauses with the same ambiguity (see Richardson 2001, 2007). Nonetheless, the proposed model, to be explained in detail in section 4, draws on Maienborn's ontology by treating all non-verbal predicates uniformly as Kimian states, i.e.

[^23]5 Predicates like dream, imagine, consider, find arguably contain a non-veridical operator and require some oblique case on the non-verbal predicate in several Finno-Ugric languages: while non-verbal predicates appear in Essive in veridical contexts, they bear some other Oblique case (Ablative in Finnish and Dative in
abstract objects denoting a property holding of an $x$ individual at $t$ time. ${ }^{6}$ In contrast to Maienborn's discourse-semantic explanation, the syntactic and semantic differences between non-verbal predicates denoting ad hoc properties/locations vs. habitual properties/locations are derived here from the presence or absence of a modal $\mathrm{OP}_{\text {alt }}$ operator that can bind the temporal variable of Kimian states in accessible worlds in the sense of Kratzer (1991).

### 2.2. Some problems

### 2.2.1. The "event variable" account

It is often noted in the recent syntactic and semantic literature on non-verbal predication that any attempt to derive the ad hoc/actual vs. habitual/characteristic property readings from the presence or absence of the Davidsonian spatio-temporal event variable in the lexical layer of non-verbal predicates will necessarily break down on overlapping contexts, in which both interpretations are acceptable:
(8) a. Alejandro es agradable. (Spanish)

Alejandro is-S nice
'Alejandro is nice (habitual property).'
b. Alejandro está agradable.

Alejandro is-E nice
'Alejandro is nice (ad hoc property).' (Camacho 2012: 453)
(9)
$\begin{array}{lllll}\text { a. } & B a & \text { dhochtúir } & \text { (é) } & \text { Seán. (Irish) } \\ \text { COP.PAST } & \text { doctor } & \text { he.ACC } & \text { Sean } \\ & \\ & \text { 'Sean was a doctor.' (habitual property) }\end{array}$
b. Bhí Sean ina dhochtúir tráth.

AUX.PAST he.NOM PREP doctor once
'He was a doctor once.' (ad hoc property) (Doherty 1996: 39-40)
(10) a. Ivan byl pjan-yj / boln-oj vsju svoju zhizn'. (Russian)

Ivan was drunk-NOM / ill-NOM all his life
'Ivan was drunk/ill all his life.' (habitual property)
b. Ivan byl pjan-ym / boln-ym na proshloj nedel'e.

Ivan was drunk-INST / ill-INST on last week
'Ivan was drunk/ill last week.' (ad hoc property)
(modelled on Richardson 2007: 119)
The presence or absence of the event variable in the non-verbal predicate alone cannot explain the syntactic and semantic differences detected in Spanish, Irish and Russian copular sentences; nor can it account for the so-called "life-time effect" (see Camacho 2012 for Spanish, Doherty1996 for

[^24]Irish and Richardson 2001, 2007 for Russian). ${ }^{7}$ Furthermore, no correlation with argument and adjunct non-verbal predicates appearing in non-copular sentences can be established.

### 2.2.2. The P-incorporation account

Gallego and Uriagereka $(2009,2011)$ derive the syntactic and semantic differences between ser and estar from an abstract preposition incorporated into the copular predicate. This abstract preposition is responsible for the terminative Aktionsart of estar. At the same time, they also assume a PP projection for all adjectival and participial and locative predicates in copular sentences:


This account rests on the correlation between Spanish locative copular sentences and nominal copular sentences expressing $a d$ hoc properties, the latter of which also require a preposition (see Adger and Ramchand 2003 for a similar reasoning in Scotts Gaelic) and are selected by estar:

Estar with ad hoc properties/locations (examples from Gallego and Uriagereka 2009, 2011)
(12) Doris estaba [AP nerviosa].

Doris was nervous
'Doris was nervous.'
(13) Doris estaba [pp en Bogota].

Doris was in Bogota
'Doris was in Bogota.'
Ser with habitual properties/locations
(14) Doris es mortal.

Doris is mortal
'Doris is mortal.'
(15) Doris es [pp de Bogota].

Doris is from Bogota
'Doris is from Bogota.'
Estar $+P P$ v. ser $+D P$
(16) Obama está/*es de president desde el 2009.

Obama is of president since 2009
'Obama is (a) president since 2009.'

[^25](17) Obama es/*está el president desde el 2009. Obama is the president since 2009.
'Obama is the president since 2009.'
As will be shown in section 3, Maltese locative copular sentences do not require an overt or abstract preposition of any kind. In the present indicative, they contain merely a zero copula and a definite DP functioning as the locative non-verbal predicate. Such sentences invariably express the habitual/characteristic location of the subject, as in (18). To express the ad hoc/actual location of the subject, the verbal copula qieghed must be used with the same locative DP, as in (19):
(18) It-tabib $0 \quad$ l-isptar. (Maltese)
the-doctor COP the-hospital
'The doctor is at hospital.' (habitual location)
(19) It-tifel qieghed id-dar.
the-boy COP the-house
'The boy is in the house.' (ad hoc location) (Stassen 1996: 280)
The P-incorporation account offers no principled way to predict the interpretive difference between (18) and (19). A minor technical difficulty would also arise by having to incorporate an abstract, null preposition under the zero copula, which, then, gets spelt out as qieghed 'be'. Furthermore, in the Celtic languages (see Doherty 1996 and Roberts 2005), the habitual vs. ad hoc contrast does not hold between two verbal copulas but the pronominal copula BE and the auxiliary BE, as is demonstrated for Irish in (9a-b); in the Semitic languages (see Al-Horais 2006 and Al-Balushi 2011 for Arabic; Shlonsky 2000, 2011 for Hebrew), the same contrast holds between the zero copula and the verbal copula (both of which occur with locatives, though with different interpretations), as is shown in the Standard Arabic examples in (20)-(21):

## Standard Arabic copular sentences

(20) Ahmad-u 0 mu'allim-un.

Ahmad-NOM COP.PRES3SG teacher-NOM
'Ahmad is a teacher.' (habitual property)
(21) Yа-kиипи alyaww-u haarr-an ffi Sayfi.

PRES3SG-COP the weather-NOM hot-ACC in summer
'The weather is hot this summer.' (ad hoc property)
(Arabic, Bennamoun 2000: 47, quoted by Al-Horais 2006: 10-103)
It would be difficult to explain this cross-linguistic variation merely by P-incorporation. As such an account has no explanatory power for the zero vs. lexical verb alternation in Maltese and Standard Arabic copular sentences, it will be abandoned for the sake of a combined theory of non-verbal predication that rests on alternative states.

### 2.2.3. The discourse-semantic account

Maienborn (2003, 2005a,b) offers a whole range of tests in support of the claim that nonverbal predicates have no Davidsonian spatio-temporal event variable, only a Kimian temporal variable. This explains why they pattern alike in the well-known eventuality tests (the ein bisschen 'a little bit' test, the manner adverbial test, the location adverbial test, etc.):
(i) The "little bit" test

The adverbial modifier ein bisschen 'a little bit' allows for the temporal, the degree, and the eventive readings. With D (avidsonian)-state predicates such as schlafen 'sleep', stehen 'stand' or liegen 'lie' both the eventive and the degree readings are available, (22). Among predicates denoting K(imian)-states, stage-level predicates support the degree reading but not the eventive reading, (23), while individual-level predicates give bad results both on the eventive and the degree readings, indicating the absence of a spatio-temporal event variable in them, (24) (examples from Maienborn 2003: 11):
$D$-states: both degree and eventive readings
(22) Das Fenster hat ein bisschen offen gestanden. the window has a little_bit open stood
'The window stood a little bit open.'
'The window stood open only a little bit.'
K-state expressed by a stage-level predicate: only degree reading
(23) Carol war ein bisschen müde/wütend/hungrig.

Carol was a little_bit tired/angry/hungry
'Carol was a little bit tired/angry/hungry.'
(cf:*'Carol was tired/angry/hungry only a little bit.')
K-state expressed by an individual level predicate: not even degree reading
(24) *Die Ampel war ein bisschen gelb. the traffic light was a little_bit yellow. 'The traffic light was a little bit yellow.'

The fact that neither stage-level nor individual level predicates are compatible with the eventive reading of ein bisschen 'a little bit' supports the claim that the syntactic differences between stage-level vs. individual level predicates cannot be derived from their eventive vs. noneventive nature.
(ii) The manner adverbial test

Davidsonian eventualities are anchored in space and time. Therefore, they can be modified by manner adverbials. Copular sentences, on the other hand, give bad results with manner adverbials both with stage-level secondary predicates and with individual level secondary predicates, as they do not contain a Davidsonian spatio-temporal event variable (Maienborn 2005a: 294-295):
(25) *Paul war reglos im Zimmer. Stage-level predicate

Paul was motionlessly in.the room
'Paul was motionlessly in the room.'
(26) *Der Tisch ist stabil aus Holz. Individual level predicate the table is sturdily of wood 'The table is sturdily wooden.'

Co-variation of stage-level predicates and individual level predicates in grammaticality indicates that anchoring in space is impossible with either of them.

## (iii) The locative adverbial test

As Maienborn (2005b: 392) points out, only Davidsonian eventualities can be modified by a VP-internal locative adverbial, Kimian states cannot. ${ }^{8}$ Given that secondary predicates in German must appear in VP-final position, the locative adverbial that precedes the VP-final, adjectival non-verbal predicate in (27) cannot be anything but a VP-modifying PP:

## $V P$-modifying $P P$

(27) ${ }^{*}$ John [vp ist (gerade) im Schwimmbad fröhlich]. John is at the moment in.the swimming pool happy 'John is (at the moment) in the swimming pool happy.'

The impossibility of adverbial modification by locative PPs signals the lack of the event variable in (27). When the same locative PP is used as a non-verbal predicate and appears in VP-final position, the sentence improves, (28). Here the temporal variable of the Kimian state denoted by the locative PP is bound by the $\mathrm{T}^{0}$ head:
$V P$-final $P P$
(28) John_[vp ist (gerade) fröhlich im Schwimmbad].

John is at the moment happy in.the swimming pool
'John is (at the moment) happy in the swimming pool.'
Maienborn (2003, 2005a,b) concludes that the stage-level vs. individual level distinction (Kratzer 1995) cannot be derived from the presence or absence of the spatio-temporal event variable. The reason why neither type of non-verbal (i.e. small clause) predicate passes the eventuality tests is that they denote Kimian states, i.e. they contain a temporal variable but not an event variable. As these tests relate to event structure, they carry over to similar data in other languages without stipulation.

One important reason why Maienborn's theory needs to be complemented is that it does not extend to non-copular sentences. In particular, it does not offer a unified account of argument and adjunct non-verbal predication, as does Richardson's $(2001,2007)$ proposal for Russian non-verbal predicates:

[^26](29) Masha vsegda pokupa-et banan-y spel-ye. (Russian)

Masha always buy-PRES3SG banana-PL.ACC ripe-PL.ACC
'Masha always buys bananas ripe.' (habitual situation)
(30)

Masha kupi-la banan-y spel-ymi.
Masha buy-PAST.SG.F banana-PL.ACC ripe-PL.INST
'Masha bought the bananas ripe.' (ad hoc situation) (Richardson 2001: 10)
Richardson $(2001,2007)$ claims that Russian speakers use the instrumental case only when they have a set of logically possible alternatives in mind. The sentence in (30) entails alternative states, hence the instrumental case. The nominative case in (29) signals the absence of such entailment. ${ }^{9}$ The same case variation is found with motion verbs like priechat' 'to arrive' and vernutsja 'to return' when used with non-verbal adjunct predicates:
Ivan priechal boln-ym no vernulsja domoj zdorov-ym.
Ivan arrived ill-INST but returned home healthy-INST
'Ivan arrived in an ill state but returned in a healthy state.'
(32) Ivan priechal boln-oj i vernuls'a boln-oj.

Ivan arrived ill-NOM and returned ill-NOM
'Ivan arrived in an ill state and returned in an ill state.' (modelled on Richardson 2007: 113)
Motion verbs split eventualities into subevents and can therefore entail alternative states. When the non-verbal predicate bears the instrumental case, it denotes an ad hoc property reached at the endpoint of the eventuality. Nominative case signals that no change of state has taken place between the starting point and the endpoint of the eventuality.

By putting the burden of explanation either solely on the non-verbal predicate or solely on the copula, the existing theories miss a considerable level of generalisation: (i) some of them cannot account for the "overlap cases"; (ii) others cannot explain the "lifetime effect" of non-verbal predicates denoting a habitual property in past tense copular sentences; but most importantly, (iii) almost all of them fail to treat non-verbal argument and adjunct predicates in a uniform way.

If Maienborn's account of non-verbal predicates as 'Kimian states' is complemented with a theory of alternatives (Rooth 1992), we arrive at a unified theory of non-verbal predication in copular and non-copular sentences (see Dalmi 2010a,b,c, 2012, 2013 for a proposal along these lines). Before turning to the combined "alternative state" proposal, let's have a look at the four-way BE-system of Maltese.

[^27](ii) Greta vio a Miguel contento/*inteligente.
'Greta saw Miguel in a happy state/*in an intelligent state.'

## 3. The four-way BE-system in Maltese

Maltese is a Central Semitic Creole, with a particularly rich copular system. In addition to the pronominal copula, it shows the zero vs. lexical copula alternation in the present indicative vs. all other forms of the verbal paradigm. Furthermore, it has two overt verbal copulas, jinsab 'caused to be' and qieghed 'be', both of which are used with non-verbal predicates denoting ad hoc properties or locations. The zero copula is found exclusively in present indicative predicational copular sentences. It readily combines with non-verbal predicates denoting habitual/ characteristic properties:

Maltese (examples from Stassen 1996: 278)
(33) Albert 0/kien tabib.

Albert COP.PRES/PAST doctor.'
'Albert is/was a doctor.'
(34) Albert 0/kien marid.

Albert COP.PRES/PAST sick
'Albert is/was sick.'
(35) Albert 0/kien iddar.

Albert COP.PRES.PAST the-house
'Albert is/was at home.'
(36) It-tabib 0/kien l-isptar.
the-doctor COP.PRES/PAST the-hospital
'The doctor is/was at the hospital.'
If a non-verbal predicate denoting an $a d$ hoc property or location is used with the zero copula, the sentence sounds odd for Maltese speakers (all examples from Stassen 1996):
(37) ??L-istudent $0 \quad$ l-hanut.
the-student COP the-shop
'The student is in the shop.' (??habitual)
The shop is not regarded as a habitual location for students, hence the oddity of the sentence in (37). To express an ad hoc property/location, the verbal copula qieghed 'be' must be used:
(38) Il-vapur qieghed il-port.
the-ship stay.PRES3SG.M the-port
'The ship is in the port.' (temporary, actual)
(39) Pietru qieghed l-eżaminatur.

Peter stay.PRES3SG.M the-examiner
'Peter is the examiner.' (temporary, actual)
By the same token, forcing a non-verbal predicate denoting a habitual property or location to combine with qieghed 'be' leads to ungrammaticality:


The pronominal copula is excluded from predicational copular sentences and it does not combine with locative non-verbal predicates, (41)-(42). On the other hand, Borg (1987) notes that the zero copula is always possible in predicational copular sentences, whereas the pronominal copula is restricted to copular sentences with the equative, specificational or identificational interpretations, as in (43)-(45) (Stassen 1996: 289):
(41) *Albert hu l-isptar. (predicational locative)

Albert be.PRES3SG.M the-hospital
'Albert is in hospital.'
(42) ? ${ }^{*}$ Ganni $h u$ tabib. (predicational)

John be.PRES.3sG.M doctor
'John is a doctor.'
(43) Pietru $h u$ l-eżaminatur. (equative)

Peter be.PRES.3SG.M the-examiner
'Peter is the examiner.'
(44) Malta hi gzira. (identificational)

Malta be.PRES3SG.F island
'Malta is an island.'
(45) Il-ġiżimina $h i \quad$ fjura. (specificational)
the-jasmine be.PRES.3SG.F flower
'Jasmines are flowers.'
The four-way copular system of Maltese is summarized in (46) and (47). The zero/kien alternation reflects the past vs. non-past division within the verbal paradigm; the zero/pronominal copula alternation is a reflex of the predicational vs. non-predicational interpretations of copular sentences; finally, the zero/qieghed alternation represents the ad hoc vs. habitual contrast (see Stassen 1996, 2008 for details):
(46) Copular sentences in Maltese (Stassen 1996: 290)

| Non-verbal predicate | ZERO | JINSAB | QIEGHED | PRONOMINAL |
| :--- | :---: | :---: | :---: | :---: |
| Nominal/adjectival | $+($ perm $)$ | + | $+($ temp $)$ | + |
| Locative | $+($ perm $)$ | + | $+(t e m p)$ | - |

(47) The distribution of Maltese copulas in Higgins's typology of copular sentences (based on data from Borg 1987)

| Copular sentences | ZERO | JINSAB | QIEGHED | PRONOMINAL |
| :--- | :---: | :---: | :---: | :---: |
| Predicational | + | + | + | + |
| Equative | - | - | + | + |
| Specificational | - | - | - | + |
| Identificational | - | - | - | + |

The proposed model can accommodate the facts of Maltese and at the same time extend to argument and adjunct non-verbal predication without any recourse to the Davidsonian event variable. This makes it more attractive than the existing theories of non-verbal predication.

## 4. An "alternative state"-account without event variables

### 4.1. The proposal

It is proposed here that the Kimian temporal variable of argument or adjunct non-verbal (i.e. small clause) predicates can be bound in two ways, giving rise to the habitual vs. ad hoc property/location readings, respectively: (i) by the T (ense) operator above the primary, i.e. verbal, predicate or (ii) by an $\mathrm{OP}_{\text {att }}$ alternative operator, which takes the whole proposition in its scope and ranges across accessible worlds in the sense of Kratzer (1991). ${ }^{10}$ In the case of (i), no alternative states are entailed and the habitual property reading emerges; in the case of (ii) alternative states are entailed, yielding the ad hoc property reading. This is illustrated in (48a) and (48b) respectively: ${ }^{11}$
(48) a

b.


Non-verbal predicates without an alternative state entailment are incompatible with durative adverbials and the episodic operator, (49)-(50). If, however, alternative states are entailed by the primary predicate, the same non-verbal predicate suddenly becomes

[^28]acceptable in modal, conditional and episodic environments, as is demonstrated by the Russian data in (51)-(53): ${ }^{12}$
(49) ${ }^{\star}$ Ivan byl vysok-im / inteligentn-im celyj den. (Russian) Ivan was tall-INST / intelligent-INST whole day 'Ivan was tall/intelligent all day.'
(50) *Ivan byvaet vysok-im / inteligentn-im. Ivan COP.EPS tall-INST / intelligent-INST 'Ivan is (in the habit of being) tall/intelligent.'
(51) Ivan mozhet byt' vysok-im / glu-pym, ja vs'e-taki ljublju ego. Ivan can be.INF tall-INST / dumb-INST I still love.1SG him 'Ivan may well be tall/dumb, I still love him.'
(52) Esli Ivan byl by bolee vysok-im / bolee intelligentn-ym, if Ivan be.PAST COND more tall-INST / more intelligent-INST
ja by vyshla za nego zamuzh.
I COND go.PAST.F for him married
'If Ivan were taller/more intelligent, I would get married with him.'
(53) Ivan inogda byvaet glup-ym.

Ivan sometimes COP.EPS dumb-INST
'Ivan is sometimes dumb.'
The reason for this is that propositions with a modal, conditional, or episodic operator entail the existence of accessible worlds, where alternative states become interpretable.

The structure assumed for sentences containing a non-verbal predicate with the ad hoc property interpretation in Russian is given in (54). ${ }^{13}$ In this structure $\mathrm{OP}_{\text {alt }}$ merges with the $\mathrm{T}_{0}$ head above the VP and binds the temporal variable of the non-verbal predicate within the PiP projection, in accessible worlds:
(54)


Ivan byvaet glupym.
'Ivan is-EPS dumb.'

[^29]The presence of $\mathrm{OP}_{\text {alt }}$ legitimates the instrumental case on the non-verbal predicate and gives rise to the ad hoc property interpretation. Non-verbal predicates denoting inherent properties do not lend themselves to such interpretation. They give ungrammatical results even when combined with primary predicates that normally trigger the alternative state interpretation:
(55) ${ }^{*} \mathrm{Ja}$ videla Ivana vysok-ym / inteligentn-ym.

I saw Ivan tall-INST / intelligent-INST
'I saw Ivan (in the state of being) tall/intelligent.'
The zero copula originates as a bundle of syntactic and semantic features under the $V_{0}$ head (see Al-Balushi 2011 and Dalmi 2010a,b,c, 2013, 2015 for such proposals in Standard Arabic and in Hungarian, respectively). The defective $\mathrm{T}_{0}$ head above the zero copula restricts the domain of conversation to the actual world and therefore cannot combine with $\mathrm{OP}_{\text {alt. }}$. This makes the ad hoc property reading of the non-verbal complement illicit. Thus, the reason why sentences like (56) in Russian are ungrammatical is not the absence of phonological material, as proposed by Pereltsvaig (2007) but rather, the absence of accessible worlds, where alternative states could be interpreted:
(56) ${ }^{*}$ Ivan 0 vesel-ym.

Ivan COP happy-INST
'Ivan is happy.'
Pronominal copulas lack the $[+\mathrm{V}]$ feature and they do not project a VP at all crosslinguistically; they merely instantiate the abstract tense and agreement features of the predicate (see Al-Balushi 2011; Citko 2008; Eid 1991; Dalmi 2010a,b, 2013, Doherty 1996; Doron 1983, 1986 for similar proposals). When they combine with a non-verbal predicate, their defective T (ense) restricts the discourse domain to the actual world, excluding alternative states. In the absence of the alternative state entailment, the Kimian temporal variable of non-verbal predicates can only be bound in the actual world; this excludes the ad hoc property reading. ${ }^{14}$

## 4.2. "Rich structure" small clauses and Cyclic Agree

For a combined "alternative state" account to work in multiple BE-system languages, it is necessary to assume a rich structure for all non-verbal predicates. The idea that non-verbal predicates constitute a syntactic unit with their (lexical or null) subject has been present in the generative syntactic literature since Stowell (1981, 1983, 1991). Bowers (1993, 2001) introduces a PredP functional projection for all non-verbal predicates. ${ }^{15}$

In Citko's (2007) account of Polish copular sentences, the $\mathrm{T}_{0}$ head selects a PiP or a PsiP functional category, with either of them surmounting non-verbal predicates (APs, NPs or

[^30]PPs). In particular, if the $\mathrm{T}^{0}$ head is not filled by any lexical item, it selects a PiP; if it is filled by the pronominal copula, it selects a PsiP. The PiP projection hosts case and phi features compatible only with the verbal copula; PsiP has case and phi features which enable it to combine with the pronominal or the dual copula.

Citko (2007) assumes that the $\mathrm{Pi}_{0}$ head licenses instrumental case on nominal predicates and nominative case on adjectival predicates; $\mathrm{Psi}_{0}$ can license only nominative case and phi features on non-verbal predicates. Another property that distinguishes these two functional projections is that the pronominal copula is merged under the $\mathrm{T}_{0}$ head, i.e. it remains outside the PsiP functional projection, while the verbal copula is part of PiP, yielding a mono-clausal copular construction (see Dalmi 2010a,b,c, 2013 and Bondaruk 2013 for two alternative approaches, respectively):
(57)
a. Verbal copular sentence

'Warsaw is the capital of Poland.'
b. Pronominal copular sentence


Though later Citko (2008) modifies her proposal and assumes a PiP of two kinds, an eventive one and a non-eventive one, this correlation is preserved. Although the present proposal draws on her original 'rich structure" model, it does not adopt the "lexical selection" explanation (see Dalmi 2010b,c for details).

In the model assumed here (in line with Dalmi 2010a,b,c, 2013, 2015), the copula+nonverbal predicate combination emerges from a "rich structure" small clause, surmounted by a defective lexical layer (the so-called V-domain), a functional layer (the T-domain) and a richly articulated C-domain in the sense of Rizzi (1997, 2004, 2013). This Raising-type structure is necessary in order to maintain a uniform concept of predication relation (see Bowers 1993, 2001, Stowell 1981, 1983 and 1991 for details).

Unlike existential BE-predicates that take a theme and a location argument (see Partee and Borschev 2007 for Russian and Błaszczak and Geist 2001 for a comparison of Russian and Polish), copular BE-predicates are monadic unaccusatives that select merely a small clause complement (like all the other Raising verbs, seem, appear, and become): ${ }^{16}$
(58) $\quad \mathrm{BE}_{\text {COP }} \quad<\mathrm{PiP}>$
[+pred]
In the course of the derivation, the subject and the non-verbal predicate will have their features checked/probed overtly or covertly by the relevant functional head. In contrast to Citko's $(2007,2008)$ analysis, the present proposal assumes that both PiP and PsiP are the extended projections of the non-verbal predicate; they project within the "rich structure" of the non-verbal predicate simultaneously, hence there is no c-selection by the copula: ${ }^{17}$


The mechanism of Cyclic Agree, originally proposed by Bèjar and Rezac (2009) to treat the agreement facts of Basque double object constructions, enables non-verbal predicates to have their features checked/probed via partial Match. This machinery has proved useful for a number of unrelated phenomena and it also seems to be crucial for languages in which nonverbal predicates bear case. Cyclic Agree is realized by space extension: the search space is

[^31]extended to the next functional category if the relevant features cannot be fully licensed by the nearest one (see Bèjar and Rezac 2009 for details).

In a structure like (59), non-verbal predicates can have their [+pred], [+case] and [+phi] features licensed by the corresponding functional head in two steps. The PsiP projection is involved in licensing nominative case and phi features, while the PiP projection licenses predication and oblique case. ${ }^{18}$ Although this licensing process takes place in cycles, the exact nature of its realisation is conditional on the presence or absence of the $\mathrm{OP}_{\text {alt }}$ operator in the T-domain of primary predicates. Thus, [+obl] is licensed in PiP only if $\mathrm{OP}_{\text {alt }}$ is present in the T-domain; in all other cases, all features are licensed in canonical ways.

### 4.3. Ad hoc properties and locations: the connection

The reason why Maltese is particularly interesting for a theory of non-verbal predication is that it shows a four-way split of the copular system along the past vs. non-past, the ad hoc vs. habitual, the locative/non-locative and the predicational vs. non-predicational axes. Maltese speakers use non-verbal predicates with the zero copula to describe habitual properties/locations. The overt verbal copulas jinsab and quieghed are used with non-verbal predicates to refer to ad hoc properties/locations. The pronominal copula lacks the [+V] feature required by $\mathrm{OP}_{\text {alt }}$ and this excludes the ad hoc interpretation of the non-verbal predicate that it combines with. ${ }^{19}$

What non-verbal predicates denoting ad hoc properties and locations have in common cross-linguistically is that both of them entail alternative states. Certain primary predicates may act as alternative triggers in the sense of Beck (2007). With such primary predicates, the $\mathrm{OP}_{\text {alt }}$ operator binds the temporal variable of the non-verbal predicate in accessible worlds. This gives rise to the ad hoc property interpretation of the non-verbal predicate. In the absence of such alternative triggers, the $\mathrm{T}_{0}$ head alone binds the temporal variable of the nonverbal predicate in the actual world and the habitual reading emerges.

The proposed mechanism extends to non-verbal predicates in copular and non-copular sentences, can explain the life-time effect and can incorporate the facts of Maltese. The $\mathrm{OP}_{\text {alt }}$ alternative operator qualifies in non-veridical contexts (e.g. in dream narratives) as it ranges over accessible worlds; therefore the "alternative state" account offers wider empirical coverage than the existing accounts do.

[^32]
## 5. Summary

The paper argues that the four-way copular system of Maltese, a Central Semitic Creole, can be best accommodated in a theory of non-verbal predication that builds on alternative states. Neither the "event variable" account, nor the P-incorporation account can adequately capture the syntactic and semantic differences between non-verbal predicates denoting ad hoc vs. habitual properties. The proposed model combines Maienborn's (2003, 2005a,b) analysis of copular construction with a theory of alternatives states. This ensures that argument and adjunct non-verbal predicates in copular and non-copular sentences receive a uniform treatment.

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# Selected aspects of amount relatives: The RomanianEnglish connection 

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#### Abstract

The inter-related goals of this paper are: (i) To contribute to a better understanding of the semantic and morphological properties of amount relatives in Romanian, (ii) to compare and contrast these constructions with their English counterparts, and (iii) to bring into bolder relief than has so far been done in the literature the fact that amount relatives in general are compatible not only with an amount denotation of the complex DPs that contain them, but with an entity denotation as well.


Keywords: amount relative, maximalization, degree relative pronouns, entity vs. amount denotational ambiguity

## 1. Background on entity-denoting amount relatives

Ever since Carlson's (1977) seminal article, it is has been widely assumed that the grammars of natural languages allow 'amount relative constructions', that is to say, complex DPs containing a relative clause in which abstraction targets an amount/degree variable. There has, however, been some disagreement among researchers concerning which constructions fit this characterization.

One type of construction concerning which there seems to have been no such disagreement is illustrated by the data in (1), where the 'gap' of relativization is in a context of cardinality and the bracketed complex DP denotes an amount/degree.
(1) a. [The 15 kgs . [that you hand-luggage weighs __]] might prevent you from boarding the plane.
b. [The 6 hours [that this movie lasts __]] exceed the normal duration of a movie.
c. [The 80 kms . [that the road runs for $\qquad$ between points A and B]] exceed the distance I can run in one day.

A different type of construction, concerning which there has been some disagreement, is illustrated by (2).
(2) $\quad$ The three students $\left[\left\{\right.\right.$ (that $/{ }^{*}$ who $\}$ there are _ in the office $\left.]\right]$ arrived an hour ago.

In this case, the bracketed DP denotes (human) entities, not degrees, and the gap is not in a context of cardinality. Nonetheless, Carlson and a number of subsequent scholars were led to the conclusion that data like (2) include an amount relative on the basis of the following considerations:
[A] While the gap is not in a context of cardinality, it is in a context that may include, in addition to an entity variable, a degree variable that provides the measure of the former, as can be gathered from the fact that both versions of (3) are acceptable.
(3) There are (that many) horses in the field.
[B] The entity variable is unavailable for abstraction, being pre-empted by narrow-scope existential quantification. This unavailability is reflected in the fact that the relativizer who, which is typed for abstracting over human entities, is excluded here.
[C] The acceptable version of (2) uses a syntactic Null Operator, which is compatible with abstraction over a wide variety of variables, including variables of the type of degrees.
[D] Abstraction over degrees in comparative clauses, as well as in relative clauses like those in (1), undergoes a process of Maximalization that maps the abstract to the singleton that contains just its maximal member, if there is one, and is undefined otherwise. Maximalization has a number of consequences (see below for details), which are detectable in data like (2).
[E] The points [A]-[D] were already noted by Carlson. Grosu \& Landman (1998, 2016) built on Carlson's observations an analysis that accounts for the denotation of the complex DP. Pared down to its essentials, the analysis says the following: Since the individual variable is pre-empted by existential quantification, it needs to be 'disclosed.' The free degree variable yields an excellent disclosure mechanism by virtue of the fact that it has entity-modifying status. This mechanism amounts to pairing the degree variable with an entity variable, such that each value of the degree variable provides the measure of the entity-sum it modifies. Abstraction applies to a variable over such ordered pairs, and Maximalization maps the abstract to the singleton that contains the unique maximal pair consisting of a unique maximal degree and a corresponding unique maximal entity (if there is such a pair, the operation being undefined otherwise). Since the maximal degree is implicit in the unique maximal entity, no information is lost by 'extracting' the entity member of the pair (by an operation called 'SUBSTANCE') and by having the complex DP denote that maximal entity.

McNally (2008) challenged Grosu \& Landman's analysis sketched in [E] above on both empirical and conceptual grounds, noting that Null Operators are also compatible with abstraction over kinds, and proposing a partial analysis of such data that relies on kinds, while also expressing doubts that entity-denoting complex DPs in general can be built on amount relatives. Her objections and counter-proposals were examined in detail in Grosu \& Landman (2016, section 5.3), who argued - convincingly, in our view - that her empirical objections to
the analysis in [E] are without force, and that her own counter-proposals face a number of empirical difficulties. We also do not see that there is any serious basis for her conceptual objection. While it is not in general possible to unambiguously recover an entity from a measure value, in the particular case under consideration, where the denotation of the CP is a singleton whose member is a pair consisting of an entity and its measure, it is a straightforward matter to recover the entity from the measure. In Grosu \& Landman (2016, section 5.1 and 5.2), additional analyses of data like (2) were critically examined and argued to be inferior to the one proposed by these authors. Our own view is that until and unless a superior alternative that does not appeal to degrees is proposed, Grosu \& Landman's analysis stands, with the implication that entity-denoting amount relative constructions do exist.

In addition to the construction just discussed, there exists at least one other type of complex DP that includes an incontrovertible amount relative and may denote entities. Thus, as pointed out in Grosu (2000b, section 2.3), complex DPs of the kind shown in (1), whose gap lies in a context of cardinality, can denote entities in appropriate matrix contexts, as illustrated in (4).
(4) a. [The 40 kilos that you weigh _ in excess of your dietician's recommendations] form ugly bulges on your body.
b. [The 5 hours that I waited __ for the train] were the most unpleasant in my life.
c. [The 80 kilometers that the road stretches __ between points X and Y ] are full of potholes.

Note than in contrast to the data in (1a-c), where the complex DPs denote an amount of something, in particular, and amount of weight, time, and spatial length respectively, the complex DPs in (4) denote entities possessing a particular measure, in particular, specific portions of 'your' body, a specific time stretch (say, from 2 to 7 pm on May 2, 2015), and a specific portion of road. The only attempt at an analysis of such data that we know of is due to Kotek (2013, section 4), who proposes to view this state of affairs as an instance of 'shifted reference', a phenomenon independently attested elsewhere, e.g., in data like (5). This proposal seems to us reasonable, and we will assume it for the purposes of this paper.
(5) a. The ham sandwich wants his money back.
b. The book that I constructed in my mind four years ago weighs five pounds.

In the remainder of this paper, we will examine certain data from Romanian which have 'unexpected' properties, at least, from the perspective of what is known about English. We introduce the basic Romanian facts in section 2, and discuss the unexpected data in section 3. Section 4 briefly compares the morphological relativizing mechanisms of the two languages, and section 5 summarizes the results of the paper.

## 2. Basic Romanian data with overt relative pronouns typed for degrees

We begin by pointing out that English and Romanian have different inventories of relativizers, which are not related in one-to-one fashion insofar as distribution is concerned (we return to this point in more detail in section 4). Thus, while English has, in addition to
overt wh-pronouns typed for specific purposes, a general purpose Null Operator, which can serve as abstractor over variables that range over individuals, properties, kinds, and degrees, Romanian makes virtually no use of Null Operators ${ }^{1}$, and employs instead c-pronouns, which, like the wh-pronouns of English, are morphologically drawn from the interrogative paradigm. In addition to the pronoun care, which is construed as 'which' in interrogatives and has a much wider use in relatives, being applicable under all the circumstances where English uses who and which and some of the circumstances where it uses Null Operators, Romanian also uses a pronoun specifically typed for abstraction over degrees. This item appears both in the uninflected form cât 'how much/long/far, etc.', and in one of the inflected forms cât 'howmuch.MSG', câtă 'how-much.FSG', câţi 'how-many.MPL', câte 'how-many.FPL'.

The uninflected form is the preferred one (and for some speakers, the only possible one) in constructions comparable to (1) and (4), as illustrated in (6) ${ }^{2}$.
(6) a. [Cele patruzeci de kilograme cât /??câte cântăreşti tu _ în plus the forty of kilos how-much how-many weigh.2SG you in excess de recomandaţiile dieteticienilor] \{sunt suficiente pentru a fi clasificat of recommendations-the dieteticians-the.GEN are sufficient for to be classified ca obez / arată destul de urât pe tine\}. as obese look pretty ugly on you
'The 40 kilos that you weigh in excess of dieteticians' recommendations \{suffice for classifying you as obese / look pretty ugly on you\}.'
b. [Cele cinci ore cât / ??câte am aşteptat _ să vină trenul] \{au the five hours how-much how-many have. 1 waited SBJV comes train-the have depăşit durata normală a unui film /au fost cele mai neplăcute din viaţa mea\}. exceeded duration-the normal GEN a film / have been the most unpleasant of life-the my 'The 5 hours that I waited for the train \{exceeded the normal duration of a film / were the most unpleasant in my life\}'
c. [Cei şaizeci de kilometri cât /??câţi se întinde şoseaua _ între the sixty of kilometers how-much how-many REFL stretches road-the between Bucureşti şi Ploieşti \{sunt o distanţă mai mare decât poţi alerga tu într-o Bucharest and Ploieşti are a distance more big than can.2SG run you in a singură zi / erau pe vremuri plini de hârtoape\}. single day were once full of potholes
'The 60 kilometers that the road stretches between Bucharest and Ploieşti \{are a bigger distance than you can run in one day / were once full of potholes\}.'

The inflected forms are used when the 'phrasal head' of the complex DP includes an 'ordinary' noun, as in (7).

[^33](7) a. [Cei zece soldaţi câţi / *cât ( _) sunt ( _ ) pe baricadă] au sosit acum o oră. the.MPL ten soldiers how-many how-much are on barricade have arrived now one hour 'The ten soldiers that (there) are on the barricade arrived an hour ago.'
b. [Cei nouă cai câţi / *cât a cumpărat _ Ion] sunt din Arabia. the nine horses how-many how-much has bought Ion are from Arabia 'The nine horses that Ion bought are from Arabia.'

The data in (7) are interesting for a number of reasons. First, observe that the bracketed complex DPs denote entities. Second, observe that the gaps are all in positions normally filled by nominal expressions. Thus, the leftmost gap in (7a) is in subject position, and the gap in (7b) is in direct object position; these positions are normally filled by DPs. The rightmost gap in (7a) is in post-copular position, and may be interpreted in the same way as a gap in the English existential context there $B E \_X P$. These facts point to the conclusion that the denotation of all the gaps in (7) must also include an entity variable. Third, note that the relativizer indicates that abstraction has applied to a degree variable. This points to the conclusion that the gaps need to include a degree variable as well, most plausibly, one modifying (i.e., providing the measure of) the entity variable. Fourth, while the view of the gap that emerges from the preceding considerations is strikingly similar to Grosu \& Landman's view of the gap in English data like (2), the motivation for assuming such a gap is different in the two situations. In English, the assumption of a degree variable that gets targeted by abstraction was motivated by the unavailability of a free entity variable, in Romanian, the presence of a degree variable is an incontrovertible consequence of the degree status of the relativizer, and must be assumed independently of the availability or unavailability of a free entity variable. Thus, while pre-emption of the entity variable by Existential Closure presumably takes place in the version of (7a) with a post-copular gap, there is no reason to make such an assumption for the version of (7a) with a pre-copular gap, or for (7b).

For the sake of clarity, we wish to point out that Romanian lacks an overt dummy like the English there in existential constructions, such constructions being explicitly identifiable only by the post-copular placement of an indefinite nominal. A consequence of this state of affairs is that when the post-copular position is occupied by a gap, the outcome is superficially indistinguishable from a minimally different construction with a pre-copular gap, as can be seen in (7a). To obtain an unambiguous Romanian construction with the crucial properties of the English construction in (2) (i.e., an entity-denoting DP with the gap in a position where the entity variable is bound by narrow-scope existential quantification), it is necessary to appeal to a different existential construction, based on the verb avea 'have', and exhibiting an overt expression in subject position. This is done in (8).
(8) [Cei 5000 de admiratori câţi are __ actriţa] le fac să moară de invidie pe colegele ei. the 5000 of admirers how-many has actress-the CL.ACC make SBJV die. 3 of envy ACC colleagues-the her 'The 5000 admirers the actress has are making her colleagues die of envy.'

That (8) is a genuine counterpart of (2a) with respect to the properties indicated in the preceding paragraph can be demonstrated by exploiting a consequence of negation in existential constructions. Thus, observe that (9a) and (9b) differ semantically in the following
way (in both languages): The natural interpretation of (9a) is that two specific children are in some location other than the room, while (9b) says that the room is empty of children.
(9) a. Doi copii nu sunt în cameră.
two children not are in room
'Two children are not in the room.'
b. Nu sunt doi copii în cameră.
not are two children in room
'There aren't two children in the room.'
If we form English relatives with the gap in the positions of the italicized expressions in (9a-b), as in (10a-b), we get a coherent result in (10a), and an incoherent one in (10b), that is, one which purports to say that the non-existent children in the room are having breakfast.
(10) a. [The two children who __ are not in the room] are having breakfast.
b. \#[The two children that there aren't _ in the room] are having breakfast.

If (8) includes an existential construction, we expect negation of the existential verb to result in incoherence comparable to that in (10b), and this expectation is fulfiled, as shown in (11).
\#[Cei 5000 de admiratori câţi $\mathrm{n}-\mathrm{a}$ avut actriţa] au votat pentru alta.
the 5,000 of admirers how-many not-has had actress-the have voted for another-one(F)
' $\#$ The 5,000 admirers that the actress didn't have voted for another one.'
Having established that the data in (7) exhibit gaps construable in a way that is strikingly similar to the construal proposed by Grosu \& Landman for the gap in (2), a natural question is whether the Grosu \& Landman analysis of data like (2) also constitutes the optimal analysis for Romanian data like (7). We believe that this question should be answered in the affirmative, and will provide explicit justification for this view in section 3.

In the remainder of this section, we confine ourselves to two remarks concerning relative clauses with overt degree pronouns.

A first remark is that these pronouns permit the formation of certain types of relative constructions in Romanian that have no English counterparts, in particular, free relatives like those in (12).

> a. [Câţi (studenți) s -au prezentat] au luat examenul. how-many students Refl-have presented have taken exam-the 'All \{those / the students\} who showed up passed the exam.'
b. Voi bea [cât (vin) bea şi Ion].
will.1.Sg drink how-much wine drinks and Ion 'I will drink as much (wine) as Ion does.'

We note that the free relative in (12a) is entity-denoting, like the externally-headed ones in (7), and that the free relative in (12b) is degree-denoting, like the pragmatically preferred reading of the bracketed DP in (13) (due to Heim 1987), the other reading of this DP being unavailable for (12b).
(13) We will need an eternity to drink [the champagne they spilled that night].

A second remark is that constructions like those in (7), while are apparently relatively rare cross-linguistically, are nonetheless not an exclusive peculiarity of Romanian. As far as we know, it is found in at least one other language, Ancient Greek, as shown by the examples in (14a-b), which replicate two of the how-many types we found in Romanian, in particular, externallyheaded and free relatives respectively (note that both sub-cases of (14) are etity-denoting).
and were-astonished the.MPL of circumcision believers how-many came-together the.DAT Peter.DAT
'and all the circumcised believers that had come with Peter were astonished' (Acts of the Apostles 10.45)

> the apostles told him how-many.NPL.ACC did.3PL
> 'The apostles told him all the things they had done.' (Luke 9.10)

## 3. Maximality in the amount relatives of English and Romanian

Grosu \& Landman (1998, 2016), building on observations made by Carlson (1977), proposed that two properties of English amount relative constructions are traceable to the operation of Maximalization within CP. These are: [i] Two amount relatives not separated by comma intonation may neither 'stack' nor coordinate with proper intersective import, and [ii] the complex DP immediately containing the relative is felicitous with definite or universal, but not with existential, import. According to Grosu \& Landman (2016), [i] is a consequence of the fact that the intersection of two singletons is either trivial or null. As for [ii], its proposed motivation can most easily be understood by considering how definite/universal versus existential quantification operate on a set formed by the intersection of NP with CP. For concreteness, consider (15).
(15) $\quad\left[{ }_{\mathrm{Dp}}\{\right.$ The / all the / some $\}\left[{ }_{\mathrm{Np}}\right.$ boys who sleep] $]$ will get up soon.

The bracketed complex NP denotes the set of entities that are boys and sleep. The complex DP in the version with the denotes the maximal sum of entities in that set, in the version with all the, it exhaustively enumerates the members of that set, and in the version with some, it picks out of that set at least one member, leaving open the possibility that the member(s) thus picked out do(es) not exhaust the membership of the set. Now, consider (16).
(16) $\quad\left[{ }_{\mathrm{DP}}\{\right.$ The / all the / \#some $\}\left[\begin{array}{l}\mathrm{NP} \\ \text { books that there are __ on the desk] }] \text { must be removed. }\end{array}\right.$

In view of the fact that the relative CP denotes a singleton (by assumption), its combination with the head noun books yields, as the denotation of the complex NP, the singleton whose unique member is the maximal sum of books on the desk. The interpretation of the determiners is the same as for (15). Note, however, that the definite and universal determiners preserve the effects of maximalization in the meaning of the complex DP, while existential quantification fails to do so. To see this, note that Maximalization yields a unique sum as the member of the singleton, and definiteness picks out precisely this unique member, while
universal quantification achieves a comparable effect by exhaustively enumerates its parts. In contrast, existential quantification may in principle operate in one of the following two ways: [a] It may 'target' the parts of the sum which forms the member of the singleton, asserting the existence of at least one of them. Such a modus operandi renders maximalization vacuous, since exactly the same effect could have been achieved without maximalization, in particular, by allowing quantification to target the members of a non-singleton. On the assumption that vacuous resort to an operation, in particular, one which is an inherent property of the construction, should be blocked, we may assume that this strategy is unavailable ${ }^{3}$. [b] An alternative modus operandi, which preserves the effects of Maximalization, may be for existential quantification to assert the existence of the singleton's unique member. Use of this strategy implicates, contrary to fact, that the complex NP's member might fail to be unique, thereby giving rise to a pragmatic clash. Heim (1991) observes that such situations are infelicitous in general, and enunciates a principle she calls 'Maximize Presupposition', which is violated by existential quantification when definiteness is possible. An independent illustration (from Kotek 2013, section 5) is: in contexts where the word sun purports to refer exclusively to 'our' sun, we get contrasts in felicity like $\{$ the / \#a\} sun is shining. Grosu \& Landman trace the infelicity of the version of (16) with some to [b]. We have added [a] for completeness, and will return to the implications of both principles further below.

The phenomenon described in [ii] is also detectable with respect to English constructions like (1). Thus, all the sub-cases of (1) become infelicitous if the initial the is suppressed.

We now proceed to illustrate the effect described in (i). Thus, consider (17)-(18), which illustrate this effect in relation to English constructions like (1)-(2) respectively.
(17) The 15 kilos that your hand luggage weighs \#(and) that my hand luggage weighs will prevent both of us from boarding the plane.'
(18) a. [All the tourists who were on the island at noon (and) who had been at the volcano in the morning] returned home late.'
b. [All the tourists that there were on the island at noon \#(and) that there had been at the volcano in the morning] returned home late.'

Thus, the reduced version of (17), in which the iterated clauses purport to be construed intersectively, is infelicitous, and the full version cannot mean, e.g., that the luggage of one of us exceeds 15 kilos, and that the intersection of these weights, i.e., 15 kilos, will prevent both

[^34]of us from boarding the plane. Rather, the only construal available for the full version is one based on union, in particular, one which says that the luggage of each of us weighs 15 kilos and that this weight will individually prevent each of us from boarding the plane.

In (18), it is instructive to compare the (a) and (b) subcases, in which the relatives are of the restrictive and amount type respectively. Thus, assume for both subcases the following context: The individuals $\mathrm{a}, \mathrm{b}$ and c were on the island at noon and the individuals $\mathrm{b}, \mathrm{c}$ and d had been at the volcano in the morning. In the reduced version of (18a), if there is no comma between the relatives, both clauses are restrictive, and their construal is necessarily intersective, so that the complex DP denotes the sum btc. In the full version of (18a), this intersective construal is also available, along with one obtained by interpreting the two relatives in terms of union, in which case the complex DP denotes the sum atbtctd. In (18b), on the other hand, intersective construals are excluded, with the result that the full version unambiguously denotes atbtctd, and the reduced version is infelicitous.

Having illustrated [i]-[ii] with English data, we now proceed to consider them with respect to Romanian. Starting with [i], consider (19)-(20), the Romanian counterparts of (17)-(18).
(19) [Cele 15 kilograme cât cântăreşte bagajul tău de mână \#(şi) cât cântăreşte the 15 kilos how-many weighs luggage-the your of hand (and) how-many weighs bagajul meu de mână] ne vor împiedica pe amândoi să ne urcăm în avion. luggage-the my of hand us.ACC will.3PL prevent ACC both SBJV REFL go-up.1PL in plane 'The 15 kilos that your hand luggage weighs \#(and) that my hand luggage weighs will prevent both of us from boarding the plane.'
(20) a. [Toţi turiştii care au fost pe insulă la prânz (şi) care fuseseră dimineaţa all tourists-the who have been on island at noon (and) who had-been morning-the la vulcan] au ajuns târziu acasă.
at volcano have arrived late home
'[All the tourists who were on the island at noon (and) who had been at the volcano in the morning] returned home late.'
b. [Toţi turiştii câţi au fost pe insulă la prânz \#(şi) câţi fuseseră all tourists-the how-many have been on island at noon (and) how-many had-been dimineaţa la vulcan] au ajuns târziu acasă. morning-the at volcano have arrived late home
'[All the tourists that there were on the island at noon \#(and) that there had been at the volcano in the morning] returned home late.'

The acceptability and interpretive facts are exactly the same as for (17)-(18), and we will thus not repeat them here.

Concerning [ii], Romanian exhibits certain facts that are prima facie puzzling, and that show up both in degree-denoting and in entity-denoting constructions, such as those in (6) and (7) respectively. Thus, consider (21)-(22), and note that in addition to the full versions, the reduced versions are also acceptable, in contrast to what we find in English constructions like (1) and (2), which, as pointed out already, are infelicitous with existential force. As further illustration of the contrast between Romanian and English, we provide the data in (23), where, note, the Romanian examples contrast in felicity with the reduced versions of the translations.
(21) [(Cele) 15 kilograme cât cântărește bagajul tău de mână] te vor the 15 kilos how-much weighs luggage-the your of hand you.ACC will.3pL împiedica să te urci în avion. prevent SBJV REFL go-up.2SG in plane
'The 15 kilos that your hand luggage weighs will prevent you from boarding the plane.'
(22) [(Cei) nouă cai câţi a cumpărat Ion] sunt din Arabia. the nine horses how-many has bought Ion are from Arabia 'The nine horses that Ion bought are from Arabia.'
(23) a. [Şaizeci de kilometri cât se întinde şoseaua între Bucureşti şi sixty of kilometers how-much REFL stretches road-the between Bucharest and Ploieşti] sunt o distanţă mai mare decât poţi alerga tu într-o singură zi. Ploiești are a distance more big than can. 2 SG run you in a single day ${ }^{\prime}[*$ (The) 60 kilometers that the road runs for between Bucharest and Ploieşti] are a bigger distance than you can run in a single day.'
b. [Şaizeci de kilometri cât se întinde şoseaua între Bucureşti şi sixty of kilometers how-much REFL stretches road-the between Bucharest and Ploieşti] erau pe vremuri plini de hârtoape. Ploieşti were once full of potholes
${ }^{\prime}\left[{ }^{*}\right.$ (The) 60 kilometers that the road runs for between Bucharest and Ploieşti] were once full of potholes.'

The fluent English translations we provided for (21)-(22) concern only the full versions. What about the interpretation of the reduced versions? Data like (21) were tackled in Grosu (2009) and Grosu \& Kotek (2009), and data like (22), in Kotek (2013) ${ }^{4}$. For reasons indicated in footnotes 6 and 7, we not find these earlier accounts fully satisfactory, and we thus propose to re-examine the facts here, trying to make better sense of them.

One thing that needs to be made clear at the outset is that maximality is incontrovertibly present in all the reduced versions of the Romanian data in (21)-(22). Thus, the bracketed expression in (21) denotes the entire weight of 'your' hand-luggage, and the one in (22), the total number of horses bought by Ion. As Kotek (2013) observes, the reduced version of (21) contrasts in this respect with a minimally different example in which the relative is restrictive. The distinction between amount and restrictive relatives without the definite article is brought out by the contrast in (24), where the fluent English translation of (24b) constitutes the closest, but still imperfect, approximation we could devise.
(24)

$$
\left.\begin{array}{llllllllll}
\text { a. } & {[\text { Nouă cai }} & \text { pe } & \text { care } & \text { i-a } & \text { cumpărat } & \text { Ion] } & \text { sunt din } & \text { Arabia, } \\
\text { nine } & \text { horses } & \text { ACC } & \text { which } & \text { CL.MPL.ACC-has bought } & \text { Ion } & \text { are from } & \text { Arabia }
\end{array}\right] \begin{array}{lllllll}
\text { ceilalți } & \text { cai } & \text { cumpăraţi de Ion sunt din Libia. } & & \\
\text { the-others } & \text { horses bought } & \text { by Ion are from Libya } & \\
\\
\text { 'Nine horses that Ion bought are from Arabia, the other horses he bought are from Lybia.' }
\end{array}
$$

[^35]b. [Nouă cai câţi a cumpărat Ion] sunt din Arabia,
nine horses how-many has bought Ion are from Arabia
\#ceilalţi cai cumpăraţi de Ion sunt din Libia.
the-others horses bought by Ion are from Libya
'All nine horses that Ion bought are from Arabia, \#the other horses he bought are from Lybia.'
Thus, in (24a) the nine horses referred to do not need to be all the horses bought by Ion, but in (24b), they do need to be.

If the reduced versions of (21)-(23) are genuine indefinites (and we will argue below that they are), what makes them compatible with maximality? One tack that has been suggested to us, and that we view as problematic, is that the relative clauses might be construed as appositive, despite the absence of comma intonation. On this view, the reduced versions of (21) and (22) would have the essential import of the unambiguously appositive constructions in (25), which exist in English as well (as reflected in the fluent translations).


This approach provides prima facie legitimacy for indefiniteness, since the relative no longer contributes to the characterization of the set that existential quantification applies to, but also has an undesirable consequence. Thus, in incontrovertibly appositive constructions like (25), the only thing that is necessarily identical in the appositive and in its matrix is the cardinality/quantity. There is no necessary identity between entities, as illustrated in (26) ${ }^{5}$.

| Zece cai, | câţi | a | cumpărat | Ion, | mi-am | cumpărat | şi | eu |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ten horses | how-many | has | bought | Ion | me.DAT-have. 1 | bought | also | I |
| 'Ten horses, as many as Ion bought, I also bought myself |  |  |  |  |  |  |  |  |

In the absence of the comma intonation, identity between the entities described in the relative and those denoted by the matrix DP appears to be required (more precisely, the predicate of the relative also characterizes the external argument of the NP). Therefore, the following examples are odd:

[^36]```
(27) a. \#O sută cincizeci de kile cât cântăreşte motocicleta ta
    one hundred fifty of kilos how-much weighs motorcycle-the your
    îţi vor cauza un infarct.
    you.DAT will.3PL cause a heart-attack
    '\#150 kilos as the weight of your motorcycle can cause you a heart attack.'
    b. \#Cinci studenţi câţi stau acum cu noi la cină au murit ieri.
        five students how-many sit now with us at dinner have died yesterday
        '\#Five students who are having dinner with us right now died yesterday.'
```

Thus, (27a) seems to imply that the fact that your motorcycle has a particular weight might give 'you' a heart attack, something that is hard to make sense of without creating a special context, and (27b) implies that the five students now having dinner with 'us' died one day earlier. In other words, not just the measure phrase in (27a), but the entity measured by it as well, affects the coherence of the matrix, and in (27b), not just the number of students, but their identity as well, plays a role in establishing the coherence of the matrix. The same observations hold for the examples (22)-(23) above. But if the relatives are, so to speak, an intrinsic semantic part of the complex DP, what avoids infelicity, given what was said in [a][b] in the paragraph immediately after example (16))?

As a preamble to attempting an answer to this question, let us try to be precise concerning the way in which the definite and indefinite versions differ in meaning. For the examples (22) and (23b), which involve entity-denoting DPs that function as subjects of copular constructions, our intuition is that such data are not automatically felicitous in just any context. In particular, we find this example acceptable only if the assumed context includes not just the horses bought by Ion, but other horses as well, so that a natural continuation might be something like (28):
(28) ... alţi cai, de exemplu, cei cumpăraţi de Maria, sunt din alte locuri. other horses for example the-ones bought by Maria are from other places '... other horses, for example, those bought by Maria, are from other places'

A similar observation applies to the example (23b), which we find felicitous just in case we conceive of the stretch of road between Bucharest and Ploieşti as a proper subpart of a longer stretch of road, say, the one between Bucharest and Braşov, which measures 175 kms . Crucially, however, the stretch between Bucharest and Ploieşti must be included in the larger stretch we have in mind, and similarly, in (22), the nine horses bought by John have to be a part of the larger set of horses that serves as assumed background. The necessary assumption of a larger context is, we submit, the crucial difference distinguishing the indefinite from the definite versions of (22) and (23b): the indefinite requires the existence of a more inclusive pragmatic context, which is not necessary for the felicity of the definite version. Furthermore, the necessary inclusion of the mentioned entities in the pragmatically assumed set distinguishes the indefinite versions of (22) and (23b) from incontrovertibly appositive constructions like (25b) and (26).

For completeness, we note that a similar view can be argued for with respect to the reduced version of (21), even if things are a bit more delicate here. The semantic/pragmatic difference between the full and reduced versions of this example is hard to pin down, but not
impossible. Taking as point of departure a brief suggestion made in Grosu (2009), we feel that in the reduced version, the specific weight attributed to the hand-luggage is most naturally construed as a contextual novelty, while in the full version, this need not be so. One can see this by noting that if we assume a previous utterance by the addressee of (21) with the essential import of (29), the DP in the full version is perceived as an anaphoric reference to the previous discourse, and the one in the reduced version, as a re-assertion of what was previously said.
(29) Bagajul meu de mână cântărește 15 kg . luggage-the my of hand weighs 15 kg . 'My hand luggage weighs 15 kg .'

If so, we may say that the utterer of the reduced version of (21) assumes a background with a plurality of possible weights that the luggage might have, while the utterer of the full version need not do so. A consequence of this state of affairs is that the reduced version of (21), but not the full version, is especially natural when the speaker wishes to present the specific weight of the luggage as a contextual novelty. We note, for completeness, that this 'novelty' effect is also detectable in some of the entity-denoting examples provided in this paper, for example, in (34b) below, which is naturally construable as asserting that the person referred to does not have much money, and nonetheless manages to live decently. ${ }^{6}$

What has just been said points to a certain family resemblance between partitive constructions, e.g., [i] of footnote 3, and Romanian indefinite amount relative constructions. In both cases, there is a larger set or sum, which constitutes the 'whole' out of which existential quantification picks out a proper subpart. But the parallelism should not be pushed too far. In 'standard' partitive constructions, the whole is denoted by a syntactic constituent, and is incontrovertibly represented in the semantics. In indefinite amount relatives, the whole is defined by the union of the set defined by the complex NP and a distinct pragmatically assumed background set, which is characterized just by the head of the complex NP (e.g., for (22), \{horses bought by Ion\} $\cup\{$ horses $\}$ ). This union set is, however, not 'homogeneous' in the way the whole is in incontrovertible partitives. To make the distinction clear, observe that in, e.g. three of the boys and girls who attended the party received prizes, the three prize winners can be any three individuals in the set consisting of the union of the boys and girls. But in the indefinite amount construction of Romanian, no such freedom exists. In the reduced version of (22), the nine horses denoted by the bracketed DP cannot be, e.g., four of the horses bought by Ion and five horses from the assumed background. Rather, they can only be all the horses bought by John and no others.

To capture this state of affairs, we propose that the background set should not be imported into the semantics, and existential quantification should apply strictly to the singleton denoted by the complex NP. On this maximally conservative view, definite and

[^37]indefinite amount constructions differ only in the choice of the determiner or quantificational operation. We submit that the Romanian indefinite constructions are licensed in the following way: Existential quantification asserts the existence of the singleton's unique member, thereby satisfying the requirement that maximality should not be vacuously appealed to (see point (a) in the paragraph that immediately follows example (16)). The expected pragmatic clash between maximality and the non-uniqueness typically associated with existential quantification (see point [b] after example (16)) is avoided by allowing (non-)uniqueness to be evaluated relative to the larger, pragmatically constructed set.

If this proposal is on the right track, then Romanian and English differ in the following way: Romanian permits (non-)uniqueness to be evaluated relative to a set constructed with pragmatic help, and English (as well as other languages that behave like it, in particular, French and Modern Hebrew; see Grosu 2009, section 3, for illustrations) does not. Is it possible to make (at least partial) sense of this distinction in terms of independent formal properties of the two sets of languages?

An obvious property that distinguishes Romanian from English, French and Hebrew is an overt relativizer that is exclusively typed for degrees. In view of the fact that subordinate clauses in which abstraction targets degrees are independently known to exhibit incontrovertible maximality effects, a prime example being comparatives and equatives (see, e.g., Rullmann 1995 and pertinent references therein), the degree relativizers of Romanian provide an explicit and unambiguous indication that Maximalization is operative within the relative clause. In view of the fact that maximalizing relatives are only a proper subtype of the larger class of externally-headed relatives, and on the assumption that overt clausal typing is in general a desirable state of affairs in the languages of the world (see, e.g., Cheng 1991), the degree relativizers of Romanian adequately satisfy this desideratum, and require no further 'confirmation' of maximalization.

In contrast, English and other languages without an overt unambiguous degree relativizer do not satisfy the desideratum at issue. In English, for example, the Null Operator and the relative complementizer that do not unambiguously mark a relative clause as being an amount relative, and thus, a maximalizing one. We conjecture that definite and universal determiners may provide an alternative typing technique, by signaling that maximalization has ultimately been achieved, and that indefinite (weak) determiners do not have this ability, and are thus dis-preferred for this reason.

If what we have suggested is anywhere on the right track, the following prediction emerges: Indefinite amount relatives are expected in languages that exhibit unambiguous degree relativizers and that allow such relativizers in non-appositive clauses, and are not expected in languages with amount relative clauses that are not explicitly typed for maximality in this (or some other) way. It goes without saying that this prediction needs to be crosslinguistically tested as widely as possible, and we hope that future research will address this task.

We conclude this section by noting that the approach to the amount relative constructions of Romanian and English that we have proposed keeps the syntax and semantics maximally simple and blames the distinction on the (un)availability of a pragmatic
rescuing strategy, which might - if our conjecture is on the right track - be traceable to the (non-)existence of explicit maximality typing within the relative clause. ${ }^{7}$

## 4. The division of labour between relativizers in English and Romanian

In the preceding section, we have compared and contrasted (some of) the semantic properties of English and Romanian amount relatives. In this section, we undertake a comparable task with respect to the distribution of relativizers in the amount constructions of these two languages.

As observed by Carlson (1977) and as illustrated in more detail by Grosu \& Landman (2016), all the varieties of amount relatives in English allow only null operators, nonappositive relatives that use the relativizers who/which being restrictive.

In Romanian, the picture is more complex. We can distinguish three types of situation, in particular: (i) only cât can be used, (ii) both care and items from the cât paradigm can be used, (iii) only care can be used. We provide illustrations of (i)-(iii) below, without aiming at an exhaustive enumeration of all relevant types of situation. We also note that these illustrations conform to the acceptability judgments of the authors, and that there may well be some crossidiolectal variation in this respect, as already noted in footnote 2.

Situation (i) is found in data like (6), where the gap is in an adverbial or cardinality context.

Situation (ii) is found when the gap is in an argument position:

```
a. Ne va trebui o veşnicie ca să bem [cei 80 de litri de vin {pe care
    us.DAT will need an eternity that SBJV drink.1PL the 80 of liters of wine ACC which
    i-au / cât au} băut ei aseară].
    cl-have.3PL / how-much have.3pL drunk they last-night
    'We will need an eternity to drink the 80 liters of wine they drank last night.'
```

[^38]b. Ne va trebui o veşnicie ca să recrutăm [milioanele de soldaţi us.DAT will need an eternity that SBJV recruit.1PL millions-the of soldiers \{pe care le-au / câţi au\} recrutat chinezii într-un singur an]. ACC who CL-have.3PL / how-many have.3PL recruited Chinese-the in-a single year 'We will need an eternity to recruit the millions of soldiers that the Chinese recruited in a single year.'

The data in (31) and their fluent English translations allow two types of construal: one which involves identity of entities (and of their measure) in the matrix and the relative, and one which involves only identity of measures; the former type of reading is here pragmatically implausible, but grammatically allowed.

Situation (iii) is illustrated in (32) and (33).
a. Ne va trebui o veşnicie ca să bem [vinul \{pe care l-au / * cât us.DAT will need an eternity that SBJV drink.1PL wine-the ACC which CL-have.3pL / how-much au\} băut ei aseară].
have.3pl drunk they last-night
'We will need an eternity to drink the 80 liters of wine they drank last night.'

(32) A arătat aproape curajul \{pe care l-a $/ *$ cât a\} arătat tatăl lui. has shown almost courage-the ACC which CL-has / how-much has shown father-the his 'He showed almost the (amount of) courage that his father did.'

The constructions in (32) and (33) differ from those in (31) in that the external head contains no measure phrase. Those in (32) differ from those in (33) in that in (32), the versions with care allow both readings that involve identity of entities/substance (and of their amounts) and readings that involve only identity of amounts; in (33), only the latter reading is possible, for independent reasons (i.e., abstract nouns like courage, progress, etc., denote scales, and such scales are unique; that is to say, it makes little sense to distinguish substantively 'your" courage from 'my' courage).

The exclusion of $c \hat{a} t / c \hat{a} t ̧ i$ in (32)-(33) is due to an independent requirement on degree relatives: the matrix DP must contain a quantitative expression - see cardinals, copiously illustrated in the paper - and scalar quantitatives such as those in (34) ${ }^{9}$ - or the universal tot, toţi 'all' (see (20) above):

[^39](i) [PUŢINI câţi au încercat să dezlege taina] au reuşit. few how-many have tried SBJV unravel mystery-the have succeeded 'Few of those who tried to unravel the mystery succeeded.'
(33) a. [Puţini-i câţi au răspuns invitaţiei] au fost mulţumiţi. few-the how-many have responded invitation-the.DAT have been satisfied 'The few people who responded to the invitation were satisfied.'
b. $[\mathrm{Cu}$ puțini bani cât are] reuşește să ducă un trai decent. with few money how-much has succeeds SBJV bear a living decent 'With the little money (s)he earns (s)he manages to maintain a decent living style.'

In the absence of these elements, the examples range from marginal to completely ungrammatical. Thus, the use of câţi is totally ungrammatical, in our judgment, on the identity-of-amount readings. On the identity-of-entities/substance readings, acceptability is difficult to judge, given the pragmatic implausibility of these particular examples. If we consider pragmatically plausible examples, for instance, a variant of (20) in which toţi has been suppressed, we find it significantly degraded relative to (20) as it is, but not altogether impossible.

Furthermore, even if the above conditions are fulfilled, the use of $c \hat{a} t / c a ̂ t ̧ i$ instead of care in situation (ii) obeys felicity conditions that are not easy to describe. Intuitively, the quantity must be highly relevant for the situation, as it is, e.g., in (34).

For completeness, we note that cât/câţi- clauses also occur in comparative constructions involving quantity, often associated with the correlative atât/atâţi 'as much/many', as illustrated in (25)-(26).

## 5. Summary and results

This paper has achieved the following results:
[i] It has sought to eliminate doubts that entity-denoting amount constructions exist by bringing up and illustrating a variety of constructions in English and Romanian which fit this characterization.
[ii] It has proposed an account of the observation that Romanian, unlike English, allows indefinite amount relative constructions, both entity- and amount-denoting. In so doing, it has demonstrated that, in addition to two prima facie counterexamples to one of Carlson's diagnostics for amount - and more generally, for maximalizing - status, which were discussed in detail in Grosu \& Landman (2016, sections 2.3.1 and 2.3.2), where they argued to be apparent counterexamples only, there exists a third prima facie counterexample to that diagnostic, which, upon closer examination, turns out to be no more than an apparent one, too.
[iii] It has provided a contrastive description of the distribution of relativizers in English and Romanian amount constructions.

[^40]
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We would like to dedicate this little paper, which deals with an 'unexpected' aspect of Romanian grammar, to our good and old friend Josef Bayer from the University of Konstanz, with the occasion of his impending retirement (from teaching, but certainly not from research!) in the spring of 2016 . We offer it as a modest token of appreciation for his significant contributions to the elucidation of numerous 'unexpected' and 'puzzling' aspects of a wide variety of Germanic languages and dialects.

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# On the semantic history of selected terms of endearment 

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#### Abstract

The present paper attempts to discuss the semantic history of a handful of terms of endearment (aka pet names, sweet talk, affectionate talk, soft words, terms of affection or sweet words) and the role of the cognitive mechanisms in the changes of their meaning. We focus the reader's attention on a few lexical items which represent such mechanisms as foodsemy (e.g. honey, sugar), which seems to be one of the most prolific ones, plantosemy (pumpkin) or zoosemy (pet). Furthermore, we trace the semantic development of terms which from the beginning of their existence have been employed as pet names (sweetheart), words which are no longer endearments, because they underwent the process of meaning amelioration or pejoration (mopsy, bully) and last but not least - nouns whose semantic shift is based on the pattern (POSITIVE) EMOTIONS $\rightarrow$ ENDEARMENTS ( $j o y$ ).


Keywords: endearment, amelioration, pejoration, zoosemy, foodsemy, plantosemy

## 1. Introduction

At first sight, the world of interpersonal and intimate language that people, especially romantic partners, may develop just for themselves might seem to be infantile and deprived of creativity. By and large, we revolve around diminutive forms of words connected with pet names, various animals, children or sweetness. Depending on the context, terms of endearment serve to convey two main functions: on the one hand in some areas they are part and parcel of everyday speech and one may find it unusual if they are left out, because they express emotions and strengthen ties; on the other hand such words may be perceived as disparaging or condescending, as they may imply incompetence, foolishness or weakness of the addressee.

The aim of the following paper is to gain an insight into both the semantic history of a few selected pet names and the role of cognitive mechanisms in the changes of their meaning. In what follows we define the term endearment, subdivide endearments into smaller sets and
discuss the history of a handful of such terms which represent the mechanisms of foodsemy ${ }^{1}$ (honey, sugar, tart), zoosemy ${ }^{2}$ (pet) or plantosemy ${ }^{3}$ (pumpkin). We also trace the history of words which from the very beginning of their existence have been used as endearments (sweetheart), lexical items which used to be endearments, but underwent the process of meaning pejoration (bully) or amelioration (mopsy), and terms whose semantic shift is based on the pattern (POSITIVE) EMOTIONS $\rightarrow$ ENDEARMENTS ( $j o y$ ).

## 2. Definition and division of endearments

The term endearment may be defined as a form of address; it is a word or phrase employed either to address or describe a person, animal or inanimate object for which the speaker feels affection. It is fitting to add that endearments are coterminous with forms such as sweet words, pet names, sweet talk, affectionate talk, soft words or terms of affection (Afful and Nartey 2013). According to the Oxford English Dictionary (henceforth the OED), the word in question was first documented in English in the second half of the $17^{\text {th }}$ century in the sense 'the action of endearing or the fact of being endeared; something that endears, that excites or increases affection' ( 1663 The Object of all this Care, this Indeerment and joy, is the Ark of God.).

Terms of endearment are words which in their human-specific sense may not bear even faint resemblance to the original meaning, for example when calling your partner mushroom, dove or sugar-pie. A number of pet names derive from each other, take sweet-cheeks, sweetheart, sweetie, sweetie-pie, sweetkins, sweets or babe, baby, babykins, baby-girl, baby-face, but there is also an enormous number of terms that bear no etymological resemblance, for example apricot or button (http://www.yaelf.com/toe.shtml). The vast majority of endearments are employed with reference to people with whom we are on familiar terms; by and large, this intimate language concerns lovers, partners, close friends and family members. Note that frequently people use pet names only when they are alone and some words are only employed in specific situations (http://blog.maart.com/en/content/language-love-international-and-polish-terms-endearment). Interestingly, not all terms of endearment are of romantic nature, a few such lexical items fail to be associated with any kind of eroticism or affection at all (e.g. prawn). ${ }^{4}$

[^41]Terms of endearment ${ }^{5}$ may be subdivided into smaller sets. The vast majority of the socalled 'sweet' words fit the mechanisms of animal metaphor known as zoosemy (e.g. chick, chuck, bunny, turtle, dove, lamb, duck, duckling, lambie, dove, kitten, mouse) and of foodsemy (e.g. honey, cupcake, honey pie, sugar, muffin, cookie, peach, sugar pie), which seem to be the most prolific ones. It is more than likely that a number of foodstuffs and animal terms have idiosyncratic or nonce usages than are attested in the OED (Crystal 2014). Crystal (2014) stresses that some pet names are affected by fashion, and various types of fish serve as an example of this thesis. Hence, individual cases extracted from the OED prove that whiting ( 1529 He callyth me his whytyng.) or sparling (1570 I wylbe bolde wyth my nowne darlyng, Cum now, a bas, my nowne proper sparlyng.) used to be terms of endearment, even though now such terms might seem disparaging. Therefore, the pattern FISH $\rightarrow$ ENDEARMENT may be said to be a less popular one.

One may find isolated cases of plantosemy (buttercup, pumpkin) and words which result from a semantic shift based on the pattern INANIMATE OBJECT $\rightarrow$ ENDEARMENT, or - to be more precise - TOY $\rightarrow$ ENDEARMENT (doll, baby doll). Interestingly enough, there are a handful of cases of royal terms (e.g. queen, princess, duchess) and sky-terms (e.g. star, sunshine, sun) which also function as popular pet names. At the same time, one may speak about a group of words which name objects belonging to the conceptual category of CHILD (baby, babe, baby-face, poppet, kiddo), which refer to both adults and children. It is worth noting that there are some lexical items which in the course of time underwent the semantic process of meaning shift and are no longer used as terms of endearment (bully, mopsy, jug, pug) (Kochman-Haładyj 2007).

## 3. Methodological outline

Generally speaking, the apparatus adopted for our scrutiny draws on elements of the cognitive framework. In this section, we shall briefly account for selected principles on which the analysis of endearments is based. Firstly, following Lakoff (1987) and Taylor (1995), the notion of 'conceptual category' is understood here as embodied in our conceptual systems, which grow out of bodily experience and make sense in terms of it; moreover, the core of our conceptual systems is directly grounded in perception, body movement, and experience of a physical and social character (Lakoff 1987:xiv). The particular interest of our analysis is the conceptual category ENDEARMENTS.

In turn, the notion of 'domains' has been used by both Langacker (1987) and Lakoff (1987) for the same construct, which may be labeled as a 'frame', 'scene' or 'schema'. Langacker (1987: 488) defines it as a coherent area of conceptualization relative to which semantic units may be characterized. To be more precise, the meaning of the semantic concept 'knuckle' is relative to 'finger' or 'hand', thus these two concepts constitute a domain for 'knuckle'. In other words, a conceptual domain is understood here as a set consisting of various attributive (or conceptual) values (or elements). Furthermore, these elements are specified for various locations within the attributive paths of conceptual domains.

[^42]Following Schmid (2010: 119), the notion of 'entrenchment' is used to refer to the degree to which the formation and activation of a cognitive unit is routinized and automated. It is the relation of a lexical category to certain locations within the conceptual dimension of a given domain. Furthermore, the meaning of the analyzed words will be accounted for in terms of activation (aka highlighting) of conceptual elements. For some senses of a lexical item conceptual elements are rendered as being either foregrounded (more salient) or backgrounded (less important).

## 4. The analysis of selected terms of endearment

## BULLY

Let us commence the analysis with the semantic development of the word bully, which is documented to have undergone the process of meaning shift at least twice. The noun was originally employed as a term of endearment, but at some point of its evolution it underwent the process of meaning pejoration and acquired negatively-loaded senses.

All the consulted lexicographic sources (the OED; Word Origins; A Concise Etymological Dictionary of Modern English and A Short Etymological Dictionary of Modern English) agree that the word is of obscure etymology, although - in all likelihood - it has its roots in Dutch boel 'lover (of either sex)' and 'brother'. The former sense of the word, which is also a term of endearment, may have originated as baby-talk. Following the OED, the Dutch form comes from modern German buhle 'lover', earlier also 'friend, kinsman'.

According to the OED, the historically primary sense of bully, which survived until the middle of $18^{\text {th }}$ century, may be defined as 'a term of endearment and familiarity'. At first, the word was applied to either sex as a synonym for sweetheart and darling. Hence, within the cognitively-couched model of semantic analysis employed, we may speak about activation of the conceptual value EPICENE presupposed for the attributive path of the domain of SEX.

Later - for some unknown reasons - the noun started to be applied to men exclusively, implying friendly admiration, a good friend and fine fellow. Following the $O E D$, the lexical item was frequently prefixed as a kind of title to the name or designation of the person addressed, for example in Shakespeare bully Bottom, bully knight, bully monster or bully doctor. Curiously, in Shakespeare's plays it occurs 19 times in total as an address form (Busse 2002).

It is fitting to add that the above-mentioned senses of the word are labeled here as both obscure and archaic. Cognitively speaking, the semantics of the noun may be said to have undergone a shift within the conceptual domain of SEX; we are dealing here with the transfer from the epicene sense 'sweetheart' to the male specific one, which may be accounted for in terms of activation of the conceptual value MALE and backgrounding of the value FEMALE.

The following $O E D$ historical contexts of use testify to the historically primary positively or neutrally-loaded senses of bully:

1538 Though she be sumwhat olde It is myne owne swete bullye My muskyne and my mullye.
1688 A Band of Bully Scholars, marching under ground with their Black-Bills.
1754 I haue promised to be with the sweet Bully early in the morning of her important day.

The quotations in the $O E D$ range from 1538 to 1754, hence the lexical item had been used in its original sense for only 200 years before it fell into oblivion. As confirmed by Word Origins, the lexical item in question has undergone a decline in status. In the second half of the $17^{\text {th }}$ century the word pejorated to be used in the negatively-loaded sense 'a blustering gallant; a bravo, hector, or 'swash-buckler'; now, especially a tyrannical coward who makes himself a terror to the weak' ( 1688 A lady is no more to be accounted a Beauty, till she has killed her man, than the bullies think one a fine gentleman, till he has kill'd his.) (the OED). As noted by Ayto (2005), in the $18^{\text {th }}$ and $19^{\text {th }}$ centuries it was used with reference to a 'pimp' and nowadays, bully is employed as a synonym for a harasser of inferiors.

As to the phraseological productivity of the noun bully, the Dictionary of Phrase and Fable provides us with a note proving that in spite of the fact that nowadays the word is associated with menace, in the past it was frequently employed as a term of endearment, for example in Shakespeare's Midsummer Night's Dream ('O sweet bully Bottom') and Merry Wives of Windsor ('Bless thee, bully doctor').

## HONEY

The semantic history of the lexical item honey dates back to Anglo-Saxon times. The word appeared in a number of modern European languages thanks to the Indo-European ancestors whose special word for it, based on the form melit-, has spread in other languages, such as French and Spanish miel, Italian miele and Welsh mel (Word Origins). Nevertheless, this form failed to persist in Germanic languages, which - in turn - developed other words for 'honey', for example German honig, Dutch honing, Swedish honung, and Danish honing, which all derive from the prehistoric West and North Germanic khunagom or khunanggom (Word Origins and the OED). Following Word Origins, this may originally have described the colour of honey, hence the connection with Greek knēkós 'pale yellow' and Sanskrit kāncana'golden'.

As the OED reports, the historically primary Anglo-Saxon sense of the word in question may be defined as 'a sweet viscid fluid, of various shades from nearly white to deep golden, being the nectar of flowers collected and worked up for food by certain insects, especially the honey-bee' and hence one may speak of an entrenchment link to the macrocategories SUBSTANCE and FOOD. Yet, taking into account the historically primary sense of the lexical item one must speak of the highlighting of the attributive value SWEET presupposed for the conceptual domain of TASTE. This sense of honey is evidenced in the following contexts extracted from the $O E D$ macrostructure:

> 825 Swoetran ofer huniex and biobread.
> 1422 Hote drynke makyd wyth Hoony.
> 1838 His body, immersed in honey, was carried home for a royal burial.

Following the $O E D$, in the middle of the $14^{\text {th }}$ century honey started to be employed with reference to people in the sense 'a term of endearment: sweet one, sweetheart, darling'. At first, this sense was used chiefly in Irish (in forms hinnie, hinny) Scottish and Northumbrian, but nowadays it is also common in both Northern America and Britain. This historically
secondary sense of the noun is testified by means of the following quotations extracted from the $O E D$ :

> 1350 William seide, 'mi hony, mi hert al hol pou me makest'.
> 1712 Our affairs, Honey, are in a bad condition.
> 1968 'Honey' as an endearment, now rediscovered by southern Englishmen via Hollywood.

Undoubtedly, the process taking place here is that of foodsemy, hence we are justified to say that for the construal of the human-specific sense of honey we are dealing here with a shift from the conceptual macrocategory FOOD to the conceptual category ENDEARMENTS presented by means of the (SWEET) FOOD $\rightarrow$ ENDEARMENT pattern. Additionally, the rise of the novel sense of the word, namely 'sweetheart, darling' must be pictured in terms of activation of the conceptual element EPICENE presupposed for the attributive path of the conceptual domain of SEX. The transfer to the conceptual category HUMAN BEING may have been conditioned by the presence of a conceptual element SWEET, which is prominently relevant for the construal of both senses and hence provides the bridge for the shift.

Nowadays, apart from its historically primary sense, honey is frequently employed with reference to people we like (Hey honey, how you doing?) (http://www.urbandictionary.com/define.php?term=honey). The word also gave rise to a few compounds, such as honey-baby, honey-bun or honey-bunch which appeared at the beginning of the $20^{\text {th }}$ century and have been used as terms of endearment (e.g. I'm sorry, honeybunsorry. Guess I'm a little upset.) (Oxford Dictionary of Slang). Following Hendrickson (2008), several dictionaries of slang report that honey as a synonym for a lover is an Americanism coming from the 1880s. Interestingly enough, the same source elucidates further that in the British Museum's collection one may encounter a Greek gold betrothal ring from the $4^{\text {th }}$ century BC engraved inside with the word meli which in Greek means 'honey'.

## SUGAR

Let us move on to the semantic history of another sweet word, namely sugar. The ultimate source of the noun is Sanskrit, where the substance was named with a lexical item sharkarā initially defining 'gravel, grit'. This form was acquired by Arabic as sukkar, which made its way into English via medieval Latin succarum, Italian zucchero, and Old French sukere (Word Origins). All the consulted lexicographic sources (the OED; Word and Phrase Origins) agree that the word was first documented as zukker at the close of the $13^{\text {th }}$ century (1299 Zuker Marrokes.) to define 'a sweet crystalline substance, white when pure, obtained from a great variety of plant juices, but chiefly from those of the sugar-cane and sugar-beet, and forming an important article of human food'. In cognitive terms, the historically primary sense of the word in question may be related to the macrocategories SUBSTANCES and FOOD. Moreover, one must speak of the highlighting of the attributive value SWEET presupposed for the conceptual domain of TASTE.

It was as late as in the $20^{\text {th }}$ century when the word started to be employed in humanspecific sense as a term of endearment. The noun was frequently used in combinations, such as sugar-babe, sugar-baby or sugar-pie. The following statements extracted from the macrostructure of the OED testify this human-specific sense of sugar:

1930 Sugar-pie, common term of endearment.
1951 No, you don't, sugar, you don't go out with your cold.
1980 Okay, sugar, what are you looking for?
Similarly to honey, in the construal of the human-specific sense of sugar the process of foodsemy is at work here. Furthermore, one may speak of the diagnostic presence of the conceptual value EPICENE presupposed for the attributive path of the domain of SEX. The transfer to the conceptual macrocategory HUMAN BEING may have been conditioned by the presence of the conceptual value SWEET, which is prominently relevant for the construal of both the literal and figurative senses of sugar, and hence it provides the bridge for the shift of meaning.

## TART

In line with its etymological roots, related to French (tarte) and Med. Latin (tarta), the original $15^{\text {th }}$-century English meaning of the word tart was 'name for various dishes consisting of a crust of baked pastry enclosing different ingredients' (1400 Tartes of Turky, taste whane peme lykys.) (the OED). This historically primary sense of the word is related to the conceptual category FOOD. The word acquired a human-specific and - to be more precise - a female-specific sense as late as in the second half of the $19^{\text {th }}$ century when it was defined as an endearing term referring to females as seen from the following OED example:

1864 Tart, a term of approval applied by the London lower orders to a young woman for whom some affection is felt. The expression is not generally employed by the young men, unless the female is in 'her best'.

Cognitively speaking, the semantics of the historically secondary female-specific sense of tart may be accountable in terms of activating and highlighting the conceptual value FEMALE presupposed for the attributive path of the domain of SEX. Moreover, the mechanism of foodsemy is taking place here as well. Thus, we are dealing here with a semantic shift based on the pattern (SWEET) FOOD ${ }^{6} \rightarrow$ ENDEARMENT.

However, twenty years later tart underwent the process of meaning pejoration and for unknown reasons took on its present sense of a female of immoral character or a prostitute, never to be employed endearingly again (Word and Phrase Origins). From that moment, the semantics of tart started to be associated with the conceptual category of FALLEN WOMAN. Obviously, the rise of this female-specific and negatively-loaded sense is accountable in terms of activation of such conceptual values as IMMORAL and PROMISCUOUS presupposed for the attributive path of the domain of MORALITY, which together with the FEMALE genderdetermining attributive value account for the rise of the novel sense. This sense of tart is attested by means of the following $O E D$ quotations:

[^43]
#### Abstract

1887 The paragraph referred to the young ladies in the chorus at the Avenue and spoke of them as 'tarts'. It was suggested on the part of the prosecution that the word 'tart' really meant a person of immoral character. 1979 I evolved a new way of dressing: five-inch high-heeled shoes, tight straight skirts, very very tight cheap sweaters, and masses of make-up. I looked just like a tart.


One may observe a marked tendency to make use of the words denoting sweet food (such as honey, sugar, pumpkin) as pet names for people. Mills (1995: 234-235) accounts for the reason why cooking terms - or, to be more precise, terms denoting cake - started to be employed with reference to females in the following words:

> Like honeybun, sweetie-pie, cupcake and other terms employing a similar image, tart presumably derives from the notion of the supposed - and required - sweetness in a woman and perhaps from a male view that women are small, quick- to-consume, edible morsels.

In all likelihood, the process of metaphorisation is based on the fact that both females and tarts may be conceived of as being sweet. Hence, the conceptual element SWEET is shared by both the historically primary sense of the lexical item in question: 'a flat, usually small, piece of pastry, with no crust on the top (so distinguished from a pie), filled with fruit preserve or other sweet confection' and the historically secondary human-specific sense of tart: 'term of endearment'. In turn, the reason for the shift of meaning from the conceptual category ENDEARMENTS to FALLEN WOMAN is attributed to the fact that men tend to perceive women as sweet and easy to consume objects (Rusinek 2012).

## PUMPKIN

The logic behind a number of terms of endearment is rather obvious. Take, for example, kitten, lamb, dove or honey, sugar, muffin which are connected with either the mechanisms of zoosemy or foodsemy. Nevertheless, the use of the noun pumpkin as a sweet word seems somewhat dubious and counterintuitive (http://english.stackexchange.com/questions/133015/ how-did-pumpkin-come-to-be-a-term-of-endearment). Not surprisingly, having scoured lexicographic sources (Word Origins; 500 Years of New Words; Word and Phrase Origins) one can hardly encounter any information concerning the affectionate definition of the word in question. It is fitting to add that internet sources record the affectionate sense of pumpkin. And thus, following one of them, the lexical item in question is a pet name referring to cute, adorable or sweet persons (especially females, children and babies) (http://www.urbandictionary.com/define.php?term=Pumpkin). It is elucidated further that pumpkin is employed as a synonym for 'a sweetheart', because of its pleasing nostalgic look (Aww look, that little pumpkin is dressed in a pumpkin costume for Trick or Treating!). Therefore, we may speak about a certain conceptual bridge between a pumpkin and a sweet person in the domain of APPEARANCE, because both a vegetable and a person share the same conceptual value, that is being PLEASANT.

As to the etymology of pumpkin, following the OED, the noun was borrowed into English in the $17^{\text {th }}$ century ( 1647 He would come over to us, to helpe recruite our pumpkin blasted braines.). According to Word Origins, the lexical item comes from Greek pépōn employed with reference to a kind of melon, then it passed on to Latin as pepō. Old French took it over
as pepon and in the $16^{\text {th }}$ century it entered the English lexicon and altered to pompion. The source elucidates further that a century later, the native diminutive suffix -kin was added to the word to form pumpkin.

In the first half of the $19^{\text {th }}$ century pumpkin started to be used figuratively in the humanspecific sense 'a stupid, self-important person' ( 1830 But I ain't a pumpkin, the Squire he knows that.) (the $O E D$ ). In turn, in the $20^{\text {th }}$ century the word underwent the process of amelioration of meaning and started to be employed as a term of endearment, especially for children. The OED lists the word as part of the American variety of English. The following $O E D$ quotations provide historical evidence of this sense of the word:

> 1942 Terms of endearment, pumpkins.
> 1980 Edible terms as endearments. Punkin.
> 1987 Listen, pumpkin, I thought you ought to know.

Cognitively speaking, the historically primary sense of pumpkin 'a large fruit' is related to the conceptual category FRUIT embedded in the macrocategory PLANTS. Clearly, the rise of the human-specific sense was based on the processes of foodsemy and plantosemy. Hence, within the plantosemic developmental path, we are dealing here with a mapping between the conceptual categories PLANT and HUMAN BEING, reflected in the rise of the sense given above (PLANT $\rightarrow$ HUMAN BEING pattern). Moreover, for the construal of the historically secondary human-specific sense of pumpkin 'a stupid and self-important person' one may speak about the conceptual values FOOLISH and CONCEITED presupposed for the attributive path of the domain of CHARACTER. Moreover, having scrutinizing this sense of the lexical item, the conceptual domain that is also central for the construal of its negativelyloaded sense is that of the domain of SEX for which the conceptual values EPICENE is activated. However, taking into account the positively-loaded sense of pumpkin we need to remember that the abovementioned values, namely FOOLISH and CONCEITED, become backgrounded. On the premise that pumpkin is - by and large - employed with reference to children, we may speak about highlighting of the conceptual value YOUNG presupposed for the domain of AGE.

## SWEETHEART

In turn, some words from the very beginning of their existence until now have been employed as endearments. The history of the compound sweetheart provided by the OED says that the word appeared in English at the close of $13^{\text {th }}$ century and was from the very start applied in the sense 'darling'. It is fitting to add that, as noted in the Oxford Dictionary of Slang, the word was employed chiefly in the vocative and apart from its endearing sense, in specific context, it may be used ironically, threateningly or contemptuously as well. The historical primary sense of the compound is evidenced by the following $O E D$ quotations:

[^44]Following the Dictionary of Phrase and Fable, sweetheart is a synonym for a lover of either sex, hence one may speak of an entrenchment link to the conceptual domain of SEX for which the evaluatively neutral conceptual element EPICENE is activated. The lexical item is frequently employed in the contemporary world, for example in Frank Sinatra's song 'Two sweethearts and the summer wind'. Moreover, one may easily come across this word in a number of novels, such as Toni Morrison's Jazz: The city sky was hidden . . . otherwise it could show me stars cut from the lame gowns of chorus girls, or mirrored in the eyes of sweethearts furry and happy under the pressure of a deep, touchable sky (Metaphors Dictionary).

## JOY

Let us move on to the semantic history of the simple word joy. All the consulted lexicographic sources (the OED; Word Origins; A Short Etymological Dictionary of Modern English) agree that the noun comes from Latin gaudère 'rejoice'. According to the OED, in the history of English, the word appeared in the first half of the $13^{\text {th }}$ century and was defined as 'a vivid emotion of pleasure arising from a sense of well-being or satisfaction; the feeling or state of being highly pleased or delighted; exultation of spirit; gladness, delight'. In terms of the cognitive mechanisms put to use here, the word is part and parcel of the conceptual category HAPPINESS embedded in the macrocategory (POSITIVE) EMOTIONS. This historically primary sense of joy is evidenced by the following selected material extracted from the OED context:

1225 Auh efter pe spreoue, on ende,-beonne is pe muchele ioie.
1867 It is a comely fashion to be glad-Joy is the grace we say to God.
At the close of the $16^{\text {th }}$ century joy acquired human-specific sense and began to be employed as an endearment term synonymous for 'a sweetheart, child, or a darling' (the $O E D)$. The $O E D$ illustrates the historical presence of this sense of joy in the history of English by means of the following quotations:

1590 While I kisse thy faire large eares, my gentle ioy.
1789 Pretty joy! Sweet joy but two days old
1876 'My bonny joy!' my pretty dear.
Cognitively speaking, we are dealing here with an interesting and rare semantic shift based on the pattern (POSITIVE) EMOTIONS $\rightarrow$ ENDEARMENTS. In all likelihood, we can speak about a certain conceptual bridge between joy 'a vivid emotion of pleasure' and 'sweetheart, honey' in the domain of EMOTIONS. To be truly happy people need to be with someone who makes them happy; hence the pet name joy is used with reference to beloved people.

## PET

Historically speaking, following the $O E D$, the origin of the word pet is unknown. The first documented human-specific use of the noun in English comes from the beginning of the $16^{\text {th }}$ century when it was applied as an endearment term for an indulged (and spoiled) child (Sherk
2004). Evidently, the conceptual value that is foregrounded in the case at hand is that of YOUNG, as well as the gender-general element EPICENE, presupposed for the attributive paths of the conceptual domains of AGE and SEX, respectively. Moreover, one may also speak of the activation of such evaluatively coloured conceptual elements as INDULGED or SPOILED, presupposed for the attributive path of the conceptual domain of BEHAVIOUR. This human-specific sense of the word may be evidenced by means of the following OED historical contexts of use that go as far back as the beginning of the $16^{\text {th }}$ century:

1508 Herretyk, lunatyk, purspyk, carlingis pet.
1788 Pet, a child spoilt by improper indulgence.
Later, in the first half of the $16^{\text {th }}$ century, the word extended its meaning and started to be defined as 'any animal that is domesticated or tamed and kept as a favourite, or treated with indulgence and fondness'. The lexical item was particularly employed with reference to a lamb (or kid) 'taken into the house, and brought up by hand, a cade lamb' (the OED). In this case, the semantics of the historically secondary meaning of pet belongs to the conceptual macrocategory ANIMALS. This animal-specific sense is evidenced by means of the following quotations extracted from the $O E D$ :

1539 Item, to Thomas Melvillis Wiffe, in Falkland, at pe Kingis command, for keping of certane Pettis, and nurising of pe samyn.
1830 The animal is cleanly in its habits, and is reared in the houses rather as a pet.
In turn, as given in the $O E D$, in 1755 pet extended its human-specific sense and began to be employed with reference to adults who are indulged, fondled, or treated with special kindness or favour. This sense of the simple word is evidenced by the following $O E D$ quotations:

1755 Peat, a little fondling; a darling; a dear play-thing. It is now commonly called pet.
1825 Pet, a fond designation for a female favourite.
1976 Be a pet and fetch me a Tom Collins.
However, it was as late as at the close of the $19^{\text {th }}$ century when the above-mentioned semantics of pet developed and the noun started to be used as a term of endearment or familiar vocative. Following the Oxford Dictionary of Slang, the term is employed mostly by women, or by men to women. Moreover, pet is common in the north-east of England (Newcastle especially). See the TV series 'Auf Wiedersehen, Pet' about builders, some from Newcastle, working in Germany. In terms of the cognitive mechanisms put to use here, the construal of the human-specific sense of the word necessitates postulating activation of the conceptual value EPICENE presupposed for the attributive path of the conceptual domain of SEX. Moreover, it can also be accountable for in terms of an entrenchment link to the domain of AGE, for which the conceptual element ADULT is activated. This human-specific sense of the noun may be illustrated with selected literary contexts drawn from the OED files:

1849 Do you know, pet, it seems almost a dream to me that we have been married.
1939 There is a parcel I want to send up to Thomasine Fair. Will you run up with it this afternoon, pet?
1977 Sounds like just the job for you, pet, eh?

## MOPSY

In all likelihood, the word is an amelioration of the noun mop 'a fool'. The OED reports that the ending -sy is attached to words to form terms of endearment, as in babsy or ducksy. Mopsy employed as a sense of endearment, and defined in the $O E D$ as 'a pretty child; a darling, a sweetheart', was first recorded in the history of English in the second half of the $16^{\text {th }}$ century. This historically primary human-specific sense of the word may be confirmed with the following illustrative contexts extracted from the $O E D$ database:

```
1582 Thee mopsy her phantasye lurcheth.
1 5 8 3 \text { Borrowed for the most parte of their pretie Mopsies \& loouing Besses.}
1706 These mix'd with Brewers, and their Mopsies.
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The lexical item in question was frequently employed with reference to a child and - by and large - young females (along with mops and moppet). However, over time it started to refer to any women, especially ones of rather small stature. As reported by Crystal (2014), this sense of the word continued to be widespread in northern and eastern dialects of England. It is worth noting that even nowadays mopsy may be encountered in literature; however, it reflects a rather pejorative sense 'a slatternly, untidy woman' which developed at the very beginning of the $18^{\text {th }}$ century (the $O E D$ ). The $O E D$ offers the following quotations in support of this negatively-loaded sense of the word:

> 1700 Crew, Mopsie, a Dowdy, or Homely Woman.
> 1958 Poor Swann's pain and frustration are a simpler matter, Odette de Crécy being the most commonplace of lying mopsies and a born torturer of the sensitive.

Cognitively speaking, to account for the historically primary sense of mopsy 'a pretty child; a darling, a sweetheart', one may speak about an entrenchment link to the attributive path of the domains of SEX, AGE and APPEARANCE, for which the conceptual values EPICENE, YOUNG and PRETTY are foregrounded respectively. In turn, the rise of the historically secondary sense 'a slatternly, untidy woman' is accountable for in terms of the activation of such a negatively-loaded conceptual value as DIRTY presupposed for the attributive path of the domain of CHARACTER AND BEHAVIOUR. Moreover, we may speak about the prominence of the FEMALE gender-determining attributive element to account for the rise of the novel sense. Having considered the historical development of lexical items which represent objects belonging to the conceptual category FEMALE HUMAN BEING, we may come to the conclusion that - in the vast majority of cases - we encounter the process of the evaluative downfall of such terms. Women-terms, even the most innocent ones, may in the course of time acquire new negatively-loaded senses and become offensive; and it is mainly due to the fact that - as stressed by Bosmajian (1974: 90) - the language of sexism relegated women to the status of children, servants, and idiots, to being the 'second sex' and to virtual invisibility.

## 5. Conclusions

Given that endearments originate from our individual, linguistic and national creativity, it is not an easy task to compile a comprehensive dictionary of such terms. Suffice it to say that apart from expressions deeply ingrained in a given culture, this domain evolves very quickly; many terms fall into oblivion and new ones constantly extend our lexicon. Furthermore, a number of endearments undergo the processes of meaning amelioration (see mopsy) or pejoration (see bully, tart). Not infrequently, we deal with a situation in which positively- or neutrally-loaded lexical items naming objects belonging to the conceptual category ENDEARMENTS acquire new, negatively-loaded senses and sometimes may even become offensive. The semantic developments of bully or tart prove that the historically primary positively-loaded sense of a word may fall into oblivion and be replaced with a new one which by no means resembles its initial sense. Degradation of meaning is frequent when analyzing terms which used to be sweet words (for example bully, tart). Furthermore, due to the fact that ENDEARMENTS are associated with POSITIVE EMOTIONS, especially LOVE, a group of pet names started to be used with reference to the domain of SEXUALITY, and - to be more precise - FALLEN WOMEN, for example tart which today is known as a promiscuous woman.

It should be noted that there is no scale which would indicate which term is the most or the least 'endearing'. Provided that the speaker's intention is to evoke positive feelings, sweet words seem to be rather equal. ${ }^{7}$ Interestingly, English pet names seem to be neither poetic nor exalted; and apart from a few cases they lack humour and creativity. Obviously, such terms usually refer to notions associated with something positive, for example tasty sweet food (honey, sugar, tart), nevertheless one may encounter quite a few terms which might sound offensive, although we can take it for granted that they are endearments (pumpkin, bastard, monster, freak) (The Concise New Partridge Dictionary of Slang and Unconventional English).

Not surprisingly, taste and animal terms seem to be two dominant motifs in the creation of new endearments, hence we may speak about two main patterns, namely (SWEET) FOOD $\rightarrow$ ENDEARMENT and ANIMAL $\rightarrow$ ENDEARMENT. However, as noted by Crystal (2014), the lack of the domain FLOWERS seems to be most surprising when analyzing endearments. Apart from daisy, which is an obscure term of admiration ${ }^{8}$ one may come across nonce usages of daffodil, tulip and other flower-terms, but their frequency is not sufficient to be documented by lexicographers. The author elucidates further that among the endearments, the lexical items naming objects belonging to the domain APPEARANCE are few and far between. One may encounter only a handful of terms connected with the domain COLOUR (e.g. golpol, pinkany) ${ }^{9}$, an allusion to the eyes (e.g. nykin) ${ }^{10}$ and a handful of words relating to

[^45]the domain SIZE (e.g. pug) ${ }^{11}$. The domain BEHAVIOUR is likewise missing, as Crystal (2014) notes only one pet name (wanton) ${ }^{12}$ belonging to this domain.

Undoubtedly, the phenomenon of endearments has not yet been fully examined in English. A researcher comes across a number of obstacles when delving into this constantly changing conceptual domain, such as the shortage of sources. The existence of such terms is important from linguistic and social viewpoints, as they clearly demonstrate both language changes and relations between people. Examining pet names from a given country would tell us a lot about not only a language, but also a culture.

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'darling, pet' was even shorter, as the word was in use for only about twenty years. It appeared at the close of the $16^{\text {th }}$ century ( 1599 The other was Hero, she was a pretty pinckany and Venus priest.) and vanished soon afterwards ( 1622 That pink-an-eye jack-an-apes boy, her page.).
${ }^{10}$ The OED provides us with two quotations taken from the same source testifying the existence of this endearment ( 1639 I hope my dearest Jewel is not going to leave me. Are you Nykin? Fondle~wife, Go naughty. Nykin, you don't love me.)
${ }^{11}$ According to the OED, pug employed as a term of endearment entered the English vocabulary stock in the $16^{\text {th }}$ century ( 1566 If in a couche, a fyne fleesde lambe a kinge shoulde cause to ryde, And geve it rayments neate and gay. And call it pugges and prety peate), but soon fell into oblivion, as the last quotation recorded in the macrostructure of the OED comes from the beginning of the $17^{\text {th }}$ century ( 1611 M'amie, Ma belle m'amie, my prettie Pug).
${ }^{12}$ The OED claims that the existence this human-specific sense of wanton 'a person, esp. a child of playful, roguish or sportive conduct (sometimes used as a term of endearment)' was short-lived. Consider the following OED-recorded contexts of use:

1589 Wepe not my wanton! smile vpon my knee!
1616 Peace my wantons.

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# When focus goes wild: An empirical study of two syntactic positions for information focus* 

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#### Abstract

My goal in the present paper is to carry out an analysis of the syntactic and discourse properties of Information Focus (IF) in Southern Peninsular Spanish (SPS) and Standard Spanish (SS) varieties. Generally, it has been argued that IF tends to occur last in a sentence since new information is placed in final position, following the End-Focus Principle as well as the Nuclear Stress Principle (Zubizarreta 1998). Focus fronting has been hence reserved for those cases in which a clear contrast between two alternatives is established, namely Contrastive Focus (CF) and Mirative Focus (MF) (cf. Cruschina 2012). The starting hypothesis here is that IF can appear as a fronted element in a sentence and that SPS speakers show a higher degree of acceptability and grammaticality towards such constructions, as opposed to SS speakers. This points toward a certain degree of microparametric variation in Spanish syntax (an understudied area), which will be tested by means of a grammaticality judgement task run among both SPS and SS speakers.


Keywords: Southern Peninsular Spanish, Standard Spanish, information focus, mirative focus, contrastive focus, focus fronting

## 1. Introduction

This paper explores the discourse-syntax properties of a specific type of focus construction in Spanish, namely Information Focus (IF) Fronting. It has been generally asserted that Spanish lacks this type of discourse-based movement on the basis that the focus found in the Left Periphery (LP) of a sentence always conveys some sort of contrast, thereby instantiating what is termed as Contrastive Focus (CF). Cruschina (2012) explicitly groups Italian and Spanish together in that both can have Focus Fronting only if it bears a contrastive flavour, following

[^46]Rizzi (1997) for Italian, and Zubizarreta $(1998,1999)$ and López (2009) for Spanish. This is illustrated in (1).
(1) a. ¿Qué compró Pedro?
what buy-past.3sg Pedro
'What did Pedro buy?'
b. Pedro compró manzanas. Pedro buy-past.3sg apples
c. \#Manzanas compró Pedro. 'Pedro bought apples.'

As indicated by \#, sentence (1c) is regarded as non-felicitous. It is not acceptable as an answer to (1a). The reason provided in the literature is that in Spanish Information Focus must always be post-verbal, and when focus is preposed it expresses contrast. ${ }^{1}$

I show that the unacceptability of examples such as (1c) is subject to microparametric variation (sensu Roberts 2012 and Biberauer et al. 2010). Some varieties of Spanish (Southern Peninsular Spanish, including Andalusian and Extremaduran Spanish) seem to obviate the post-verbal condition on Information Focus. I discuss the syntax of different types of focus, namely Contrastive/Corrective Focus (CF), Mirative Focus (MF) and Information Focus (IF), and propose that Information Focus has a designated position in the left periphery in SPS, which is missing in Standard Spanish (SS). Information focus fronting is an understudied phenomenon in Spanish, as clearly shown by the new data presented here. ${ }^{2}$

Descriptive surveys such as the one carried out by RAE-ASALE do not take into account the different types of focus and include all kinds of fronting within a single group regardless of the distinct salient properties at the syntactic, interpretive and phonological levels. In this group phenomena are mixed up such as Contrastive Focus, Mirative Focus (Cruschina 2012; Jiménez-Fernández 2015), Resumptive Preposing (RP; Cinque 1990, Leonetti \& Escandell 2009), and Quantifier Fronting/Negative Preposing (QF; Barbosa 2001; Bosque 1980). Researchers have agreed that in all these cases contrast is present:
(2) a. ¡Por Dios, dos botellas se han bebido! (MF, adopted from Cruschina 2012) by god, two bottles CL have-pres.2pl drunk
'My God! They have drunk up two bottles!'
b. Lo mismo digo (yo). (RP, Leonetti and Escandell 2009: 160)
the same say-pres.1sg (I)
'I say the same thing.'
c. Algo tendrán que hacer ustedes. (QF, RAE-ASALE 2009/2011: 2988)
something have-fut.3pl that to.do you-pol.pl
'You will have to do something about it'.

[^47]Studies in generative grammar have emerged that distinguish some of these Information Structure (IS) phenomena (Bianchi 2012, Cruschina 2012, Haegeman 2012). In Spanish, some works have identified focus preposing other than purely contrastive (Uriagereka 1988, Quer 2002, Gallego 2007, Leonetti \& Escandell 2009), yet all these analyses agree that Spanish focus fronting is never associated with purely new information. Fronting is a device used to express either contrast on a specific constituent or on the sentence polarity (Verum Focus).

In this work, I show that interpretative and syntactic properties can be used to establish a more accurate typology of focus, concentrating on the peripheral position that IF can fill in some varieties of Spanish (Andalusian, Extremaduran). ${ }^{3}$ An experiment is conducted among speakers in which they have to judge the grammaticality of fronted focus constructions.

In this grammaticality judgement task, informants were faced with examples in which IF occurred in post-verbal position and in the LP. The (A) sentences below provide the context where the informants have to rightly place the sentences that follow:
(3) A. El chocolate que había puesto en la nevera ya no está.
the chocolate which have.past.1sg put in the fridge already not be-pres.3sg
¿Quién lo ha cogido?
who it have.pres.3sg taken
'The chocolate bar I had put in the fridge is no longer there. Who has taken it?'

B: a. Lo cogió Pedro, $y$ se lo ha comido todo.
it take.past.3sg Pedro, and CL it have.pres.3sg eaten all
b. Pedro lo cogió, y se lo ha comido todo. ${ }^{4}$
'Pedro took it, and has eaten it all.'
The informants were divided into 2 different groups. The first group includes areas from northern Spain and Madrid (this is what I will call Standard Spanish ${ }^{5}$ ), whereas the second group comprises the south (corresponding with Southern Peninsular Spanish). It will be shown that SPS speakers accept focus fronting when this focus conveys purely new information, whereas SS do not allow naturally for this type of focus fronting. This confirms the microparametric distinction argued for in this paper.

[^48]The article is organised as follows. In section 2 I discuss the different types of fronted foci that can be found in the LP. In section 3 I present the data and the test run among Spanish speakers. Section 4 discusses the results of the test. Section 5 summarises my main findings.

## 2. The focused constituent: different types of Focus

The label Focus is often applied to phrases performing two discourse functions, namely (a) the introduction of new information (IF) and (b) the introduction of a contrast (CF) (Kiss 1998). A number of scholars have argued in favour of a clear-cut distinction between these discourse categories, based on syntactic, phonetic, phonological and discourse factors (cf. Kiss 1998, Zubizarreta 1998, Nespor \& Guasti 2002, Donati \& Nespor 2003).

Cross-linguistic evidence supports the necessity of a distinction between different types of Focus, which is syntactically encoded (cf. Molnár 2006, Bentley 2007, Cruschina 2012, Bianchi \& Bocci 2012, Bianchi 2013), and differently interpreted at the interfaces (Frascarelli \& Ramaglia 2013).

Within Generative Grammar two main approaches to the notion of focus can be found. In the Alternative Semantics approach (Rooth 1992, Beaver \& Clark 2008), Focus generates a set of alternatives: given a question like "What does John want?", a set of propositions varying in the reference of the focused direct object (\{John wants coffee, John wants tea, ...\}) constitutes congruent answers to it.

On the other hand, the Structured Meaning approach (Krifka 2006) instead partitions the proposition into a Focus (e.g., 'coffee' in the example above) and a background (the denotation of the rest of the clause, i.e. the property of being something that John wants).

When the different types of focus are addressed, we are confronted with different semantic operations, which are reflected in the syntactic derivation. Hence I concentrate on both interpretive and syntactic properties which are used to distinguish the type of foci.

### 2.1. Information Focus

According to the Structured Meaning approach (Krifka 2006), question-answer congruence requires that the Focus in the answer should correspond to the interrogative phrase of the question, and that the backgrounds should be identical. The element in the answer satisfying the information request in the question constitutes new information. This is illustrated in (12):

A: ¿A quién viste en la playa?
to whom saw-past.2sg at the beach
'Who did you see at the beach?'
B: Vi a Marta.
saw-past.1sg to Marta
'I saw Marta.'
In this dialogue the information provided by the object a Marta in the answer fully satisfies the information request in the question, and hence it stands as the Information Focus (IF).

This focus is usually placed in final position in Spanish, as claimed by Zubizarreta (1998), Gutiérrez Bravo (2008) and López (2009).

### 2.2. Mirative Focus

Following Cruschina (2012), Bianchi et al. (2014, to appear) and Jiménez-Fernández (2015), I consider Mirative Focus (MF) as not purely informative. It provides new information and additionally, based on the speaker's knowledge of the hearer's expectations, signals that such information will be unexpected (see Piera 1987 for an earlier approach to this type focus):
(5) ¡No me lo puedo creer! ¡Dos botellas nos hemos bebido! not me it can-pres.1sg believe Two bottles CL have-pres.1pl drunk 'I can't believe it! Two bottles we drank!'

Âmbar (1999: 41) terms a similar kind of fronting in Portuguese as evaluative construction, involving the fronting of an emphatic and evaluative element to a dedicated functional projection (i.e., the Evaluative Phrase) in the left periphery. Due to its unexpectedness, MF has some exclamative flavour

Mirative is not dependent on a question-answer context. Contrast is established with an element that is part of the shared knowledge of the participants and can be semantically characterized as a "proposal to negotiate a shared evaluation" (Bianchi 2012). The set of alternatives is therefore very large. In example (5), the DP dos botellas stands as one alternative among many other alternatives.

### 2.3. Corrective/Contrastive Focus

When Focus marks a constituent that is a direct rejection of an alternative, either spoken by the speaker himself ('not A, but B') or by the hearer, the Focus is 'Corrective'. Correction thus implies removal of information (cf. among others Gussenhoven 2007), as seen in (6), and can also apply to given material, as illustrated in (7):
(6) A: I heard you met Fred yesterday.

B: No, I met Bill.
(7) A: I know John is going on vacation with Fred and Bill.

B: No, he's only leaving with Bill.
Correction implies a Focus-Background partition and the set of alternatives is very restricted (limited by the semantic properties of the rejected item). However, this type of Contrast may not be associated with a corrective import, as is shown in (8) from Frascarelli \& JiménezFernández (2013) and (9) from Kratzer (2004):
(8) My doctor is always so late that a newspaper is not enough: you can read a novel from Tolstoj while you wait!
(9) A: Guess what? Fred passed.

B: If Fred passed, bar exams have become too easy.

Pure Contrast implies a Focus-Background partition (which can be created by the sentence itself) and the set of alternatives is restricted. In Romance languages, CF has a specific position in the LP. ${ }^{6}$ This is illustrated from Spanish in (10) from Hernanz (2011: 251, her (3a)):
(10) LAS ACELGAS detestan los niños (y no la pasta).
the chards detest-pres.3sg the children (and not the pasta)
'Children detest chard, not pasta.'
As stated earlier, it is generally assumed that the focus position in the LP is for CF. Recall that MF can also occupy a focus position in the LP (see Cruschina 2012, Bianchi et al. 2014, to appear, and Jiménez-Fernández 2015 for crucial differences between CF and MF). However, IF has been claimed to always occupy a low position. Ortega-Santos (2005) and JiménezFernández \& İşsever (2012) suggest that this position is the specifier of vP; cartographic analyses such as the one in Belletti (2004) argue for a designated Focus position in the low periphery. I leave this question aside since it does not affect the work presented here, but see Ortega-Santos (forthcoming) or Ortega-Santos (2013) for a fuller overview of the derivational alternatives that have been put forward for subjects at the right edge.

Arguably, Focus is encoded as a syntactic feature [+Focus] which characterises all types of focus, and conveys purely new information. The distinction of types is realised by different combinations of features (a general line pursued by Jiménez-Fernández 2015):


Feature-based typology of foci

$$
\begin{aligned}
& \text { IF: }[+\mathrm{Foc}] \\
& \text { CF: }[+\mathrm{Foc}][+ \text { Contrast }] \\
& \text { MF: }[+ \text { Foc] [+Unexpectedness] }
\end{aligned}
$$

Figure 1: Feature-based typology of foci
Note that I am taking a syntactic approach to Focus. Not all authors agree with this. However, this is a plausible implementation and the exact details do not have any bearing on the argumentation of the paper.

## 3. Methodology and data

Recall that my working hypothesis is that in Southern Peninsula Spanish IF can also occur in a high position at the LP. To prove the validity of this hypothesis, a test has been created for a systematic interface analysis of Focus Fronting (FF), for Mirative, Corrective/Contrastive Foci, but most especially for IF both in situ and fronted in two varieties of Spanish: Southern Peninsular Spanish (SPS, Andalusian and Extremaduran) and Standard Spanish (SS, roughly standing for Northern Iberian Spanish, including Asturian Spanish, Catalan Spanish, Basque Spanish, and Madridian).

[^49]It is really complicated to identify what can be called Standard Spanish, as argued in RAEASALE (2009/2011), but given the unifying character of Spanish in general, it is taken to be the variety spoken by educated people in all dialects (though I am not taking into account American varieties). The divide between SS and SPS should thus be seen as geographically and linguistically motivated (see Alvar 2004, for the defining properties of SPS).

In the survey, all types of focus to be examined here have been taken into consideration. FF with the specific discourse functions of CF and MF have been systematically compared with FF with an IF function on purpose. In-situ IF has also been tested to make sure that informants were giving the right pragmatic interpretation to the relevant sentences.

Informants ( 27 SPS and 33 SS native speakers) were given a set of sentences preceded by a context inducing a specific focus reading of the preposed or in-situ constituent (judgments could be expressed as */??/OK). In short, the experiment was a grammaticality judgment task using a ' 3 -point scale'.' This was presented in writing. In particular, a sentence introducing the context was provided for speakers to react. This created the environment to induce the appropriate focus interpretation of both preposed and non-fronted foci. Speakers were confronted with sentences in a random order to avoid any sort of predetermined pattern in their answers.

In the examples of the experiment, sentences A constitute the stimulus context and focused constituents in sentences B are underlined. For presentation in this work, I have grouped sentences depending on the type of focus and the type of FF involved. Also the object/subject asymmetry has been taken into account since movement of subjects does not necessarily have an impact on the linear ordering of sentence constituents. Subjects may move to spec-TP for reasons not to be connected with discourse. Alternatively, subjects may move to the CP area when they have a specific role in discourse. Both possibilities will yield the same word order for preverbal subjects.

Examples (B) contain post-verbal focus, whereas those in (B') comprise preverbal focus. For the stimulus sentence I just provide the English translation, but for the sentences to be judged I offer both the gloss and the translation.

## Subject as IF:

A: El chocolate que tenía escondido ya no está. ¿Quién lo ha encontrado? 'The chocolate I had hidden is not there anymore. Who has found it?'

B: Lo encontró Limena. $Y$ se lo ha comido entero.
it find-past.3sg Jimena and CL it have-pres.3sg eaten all
B': Limena lo encontró. $Y$ se lo ha comido entero.
Jimena it find-past.3sg and CL it have-pres.3sg eaten all 'Jimena found it. And she has eaten it all.'

[^50](12) A: ¿Quiénes van este fin de semana a la playa? 'Who is going to the beach this weekend?'

B: $V a \quad$ toda la familia. go-pres.3sg all the family

B': Toda la familia va.
all the family go-pres.3sg
'All the family is going.'
(13) A: ¿Quién ha ganado el Premio Planeta este año? 'Who has won the Planeta Prize this year?

B: Lo ganado Lorge Zepeda. it win-past.3sg Jorge Zepeda

B': Lorge Zepeda lo ha ganado. Jorge Zepeda it win-past.3sg 'Jorge Zepeda won it.'

## Object as IF:

A: ¿Qué está comiendo Ángela? 'What is Angela eating?'

B: Está comiendo pasta.
be-pres.3sg eating pasta
B': Pasta está comiendo.
pasta be-pres.3sg eating
'She is eating pasta.'
(15) A: ¿A quién viste en la fiesta?
'Who did you see at the party?'
B: Vi a Manuela, pero no me sorprende porque la organizaba Pablo. see-past.1sg to Manuela but not CL surprise-pres.3sg because it organise-past.3sg Pablo

B': $\underline{A}$ Manuela vi, pero no me sorprende porque la organizaba Pablo. to Manuela see-past.1sg but not CL surprise-pres.3sg because it organise-past.3sg Pablo 'I saw Manuela, but that was no surprise since it was organized by Pablo.'
(16) A: ¿A cuántos alumnos examinaste en junio?
'How many students did you examine in June?'
B: Examiné $\underline{a} \underline{25} \underline{\text { estudiantes. Era lo que esperaba. }}$ examine-past.1sg to 25 students. be-past.3sg the what expect-past.1sg

B': $\underline{A} \underline{25}$ estudiantes examiné. Era lo que esperaba.
to 25 students examine-past.1sg. be-past.3sg the what expect-past.1sg 'I examined 25 students. It was what I expected.'

## Object as CF

(17) A: Ángela está comiendo salchichas.
'Angela was eating sausages.'
B: No, no. Está comiendo pasta, no salchichas.
No, no. be-pres.3sg eating pasta, not sausages
B': No, no. Pasta está comiendo, no salchichas.
No, no. pasta be-pres.3sg eating, not sausages
'No, no. She is eating pasta, not sausages.'
(18) A: Pilar Eyre ha ganado el Premio Planeta este año.
'Pilar Eyre has won the Planeta Prize this year?'
B: ¡Anda ya! Lo ganó Lorge Zepeda, no Pilar Eyre.
walk-imp already it win-past.3sg Jorge Zepeda, not Pilar Eyre
B': ¡Anda ya! Lorge Zepeda lo ganó, no Pilar Eyre.
walk-imp already Jorge Zepeda it win-past.3sg, not Pilar Eyre
'No way! Jorge Zepeda won it, not Pilar Eyre.'

## Object as MF

(19) A: ¿A cuántos alumnos examinaste en junio?
'How many students did you examine in June?'
B: Examiné a $\underline{25}$ estudiantes. No era lo que esperaba, pues en clase eran 100. examine-past.1sg to 25 students not be-past.3sg the what expect-past since in class be-past.3sg 100

B': A 25 estudiantes examiné. No era lo que esperaba, pues en clase eran 100. to 25 students examine-past.1sg not be-past.3sg the what expect-past since in class be-past.3sg 100 'I examined 25 students. It was not what I expected since there were more than 100 students in my class.'
(20) A: ¿Qué está comiendo Ángela?
'What is Angela eating?'
B: Está comiendo pasta. $Y$ me sorprende un montón, porque no le gusta nada. be-pres.3sg eating pasta and CL surprise-pres.3sg a big deal since not her like-pres.3sg at.all

B': Pasta está comiendo. Y me sorprende un montón, porque no le gusta nada. pasta be-pres.3sg eating and CL surprise-pres.3sg a big deal since not her like-pres.3sg at.all 'She is eating pasta and it does surprise me since she doesn't like it at all.'

For the sake of clarity, I have divided the data into five groups depending on the type of focus involved in the relevant sentence. In the first two groups either the subject or the object has the discourse function of IF. For examples in (13) and (14) a transitive verb is used and the reply in B shows the use of postverbal subject with a clear IF function, whereas that in B' illustrates the use of preverbal subject performing the role of IF as well. Sentences in (12) include the intransitive (unaccusative) verb ir 'go', but the discourse category of the only argument of this verb is also that of IF.

The third group contains IF on the object. Sentences in (14) convey new information via a non-animate object, whereas sentences in (15) and (16) involve IF developed by a human DP
object, thereby requiring personal $a$. The reply in B shows an in-situ IF, hence postverbal object, while the reply in B' displays the possible use of a fronted IF.

The fourth set of sentences represent CF, making clear its contrastive flavour by inserting the alternative with explicitly negated. Again the reply in B involves in-situ CF, whereas that in B' contains a fronted CF. Finally, the fifth group illustrates MF, both in situ (reply B) and fronted (reply B'). The mirative interpretation is induced by explicitly inserting the unexpected reaction against the assertion where MF has been used.

## 4. Results and discussion

In this section I present the results of the experiment carried out among SPS and SS speakers. Each different discourse category and its distinct variants will be followed by a brief discussion of the figures obtained. Figures include the number of speakers who gave a positive answer (hence they have selected OK as opposed to ?? and *) about the grammaticality of the relevant construction, alongside the percentage represented by this group of participants.

Speakers were faced with sentences in which the subject of a transitive verb functioned as IF. In an SVO language such as Spanish, the preverbal position for a subject does not necessarily indicate that it is dislocated in the CP-system. It may as well be placed in spec-TP. As a consequence, with no other device than the context inducing the focus reading, speakers avoid the preverbal position and clearly prefer the postverbal position (for both SS with $82 \%$, and SPS with $78 \%$ of OK answers), which has been described in the literature as unambiguously reserved for IF-subjects (Zubizarreta 1999, López 2009, Ortega-Santos 2006), as Table 1 shows. ${ }^{8}$

Table 1: IF on subject with transitive verbs

|  | IF on subject (SPS) |  |
| :--- | :--- | :--- |
| Position of Focus | Preverbal IF | Postverbal IF |
| Grammaticality | $48 \%$ | $78 \%$ |
|  | $(13 / 27)$ | $(21 / 27)$ |
|  | IF on subject (SS) |  |
| Position of Focus | Preverbal IF | Postverbal IF |
| Grammaticality | $52 \%$ | $82 \%$ |
|  | $(17 / 33)$ | $(27 / 33)$ |

The figures obtained in the grammaticality judgement task confirm the validity of this analysis. However, the preverbal position for IF is not considered totally ungrammatical for both SS and SPS speakers.

The degree of acceptability grows higher with IF-subjects of unaccusative verbs, as shown in Table 2.

[^51]Table 2: IF on subject with intransitive (unaccusative) verbs

|  | IF on subject (SPS) |  |
| :--- | :--- | :--- |
| Position of Focus | Preverbal IF | Postverbal IF |
| Grammaticality | $63 \%$ | $96 \%$ |
|  | $(17 / 27)$ | $(26 / 27)$ |
|  | IF on subject (SS) |  |
| Position of Focus | Preverbal IF | Postverbal IF |
| Grammaticality | $18 \%$ | $94 \%$ |
|  | $(6 / 33)$ | $(31 / 33)$ |

Since Burzio (1986), it is generally accepted that subjects of unaccusative verbs are generated as their complements. Hence an SV analysis of these constructions is not available in out-of-theblue sentences. Rather, the most natural pattern for unaccusatives is VS, where the subject is part of the all-focus interpretation of the sentence. However, the very same position is used for IF. In other words, as displayed in Table 2, there is a conflation of the informationally unmarked and marked positions in the sentence used in the test, which explains why so many informants rated the sentence as fully grammatical ( $94 \%$ for SS; $96 \%$ for SPS). On the other hand, the preverbal position for IF-subjects is less natural than the corresponding postverbal one in SPS, yet it is still acceptable for most speakers ( $63 \%$ ), in clear opposition to SS (only 18\%).

In Tables 3 and 4 a different picture is illustrated. In Tables 1 and 2, the focused constituent was the subject, whose canonical position is preverbal except for unaccusative verbs. To confirm my claim that IF may involve movement to CP is quite tricky for subjects since from a linear point of view there is no difference between a subject being in TP or in CP. To sort out this problem, Tables 3 and 4 show the figures obtained for data where the focused element is the object (either a non-animate or human object). If the object is preverbal, it means that it has been moved to the LP.

Table 3: IF on non-animate object

|  | IF on non-animate object (SPS) |  |
| :--- | :--- | :--- |
| Position of Focus | Preverbal IF | Postverbal IF |
| Grammaticality | $74 \%$ | $93 \%$ |
|  | $(20 / 27)$ | $(25 / 27)$ |
|  | IF on non-animate object (SS) |  |
| Position of Focus | Preverbal IF | Postverbal IF |
| Grammaticality | $18 \%$ | $91 \%$ |
|  | $(6 / 33)$ | $(30 / 33)$ |

Table 4: IF on human object

|  | IF on human object (SPS) |  |
| :--- | :--- | :--- |
| Position of Focus | Preverbal IF | Postverbal IF |
| Grammaticality | $81 \%$ | $85 \%$ |
|  | $(22 / 27)$ | $(23 / 27)$ |
|  | IF on human object (SS) |  |
| Position of Focus | Preverbal IF | Postverbal IF |
| Grammaticality | $21 \%$ | $91 \%$ |
|  | $(7 / 33)$ | $(30 / 33)$ |

As is clear, regardless of the non-animate or human status of the object, SS still uses the postverbal position for IF, which complies with the Nuclear Stress Principle advocated for in Zubizarreta (1998) to identify IF. $91 \%$ of SS informants are inclined to employ the postverbal position for IF-objects. The percentage for preverbal objects with an IF function is quite low in SS (approximately $20 \%$ ). In contrast, SPS speakers show no clear preference for postverbal IF, though the figure obtained in this category are a bit higher than in preverbal IF. Yet, moved objects as IF is quite productive in SPS (ranging from $74 \%$ to $81 \%$ ), which makes valid my claim that SPS makes use of a specific position for IF in the LP.

To distinguish IF from other types of foci, sentences containing Contrastive Focus and Mirative Focus were offered to the participants. Recall that IF carries just one feature, namely [+ Foc], whereas CF and MF have a more complex featural array ([+ Contrast] and [+ Unexpectedness], respectively). The results are displayed in Table 5 for CF and Table 6 for MF:

Table 5: Contrastive Focus on object

|  | CF on object (SPS) |  |
| :--- | :--- | :--- |
| Position of Focus | In-situ CF | Fronted CF |
| Grammaticality | $89 \%$ | $92 \%$ |
|  | $(24 / 27)$ | $(25 / 27)$ |
|  | CF on object (SS) |  |
| Position of Focus | In-situ CF | Fronted CF |
| Grammaticality | $82 \%$ | $85 \%$ |
|  | $(27 / 33)$ | $(28 / 33)$ |

Table 6: Mirative Focus on object

|  | MF on object (SPS) |  |
| :--- | :--- | :--- |
| Position of Focus | In-situ MF | Fronted MF |
| Grammaticality | $85 \%$ | $70 \%$ |
|  | $(23 / 27)$ | $(19 / 27)$ |
|  | MF on object (SS) |  |
| Position of Focus | In-situ MF | Fronted MF |
| Grammaticality | $91 \%$ | $67 \%$ |
|  | $(30 / 33)$ | $(22 / 33)$ |

When informants were faced with data involving CF (whose discourse interpretation was clear because of the explicit mention of the denied part of the previous assertion), both a high position (preposed object) and a low position (in situ) were available for all speakers, independently of the variety. ${ }^{9}$ This is shown in Table 5. Conversely, for MF there is some

[^52]preference to leave the element conveying the speaker's unexpectedness in situ, as put forth in Table 6. However, the high position is still an option in both SS and SPS, with $67 \%$ and $70 \%$ of positive answer respectively. Economy may be somehow the reason for this preference in that, under minimalist premises, Merge is preferred over Move when both compete in the same derivation (Castillo et al. 2009).

## 5. Conclusions

In this paper, I have shown that in some varieties of Spanish (SPS) a specific position for IF is available at the LP of the sentence. This position has always been argued to denote some sort of contrast. However, the data presented in this work support the view that the focus category detected in the CP may simply convey new information in SPS, thereby carry the feature [ + Foc]. This position, however, is not activated in Standard Spanish, which confirms that microvariation in SPS (with respect to SS) affects the Information Structure/Syntax interface. This microparametric variation has been supported by experimental evidence in the form of a test run among SPS and SS informants.

This is an understudied area, at least for SPS. There are various gaps in our knowledge of microparametric variation in Spanish, given that syntax has paid more attention to the standard language (since judgements can be gathered more easily) and dialetology never had an emphasis on syntax.

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# Content with content: A content-based instruction approach to curriculum design and course assessment in academic English for business 

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#### Abstract

This article reports on the successful implementation of a content-based instruction (CBI) approach to a 6month pre-sessional academic English for business and management course at a UK university. While recognising that CBI is not a 'cure-all' and indeed that the approach brings with it particular issues, such as instructor competence in the content, the article argues CBI offers both significant and wide-ranging benefits as a language teaching approach and as such should be given greater prominence in the language teaching industry.


Keywords: language teaching, content-based instruction, academic English

## 1. Introduction

This paper reports on an ongoing and successful implementation (as judged by student feedback, peer teaching feedback and instructor introspection) of content-based instruction $(\mathrm{CBI})^{1}$ in the re-design of a 20 week pre-sessional Academic English for Business and Management (AEBM) language course at a UK university. The paper begins with an overview of relevant aspects of the CBI literature in order to contextualise the case study (section 2), after which a detailed account of the syllabus design and its motivation is given (section 3). Finally, (section 4), implications of the case study are drawn.

[^53]
## 2. Contextualising CBI

CBI traces its beginnings back at least three decades, to 'the mid to late 80s' (Brinton 1997 in Kasper 1997). 1986 saw the publication of both Bernard Mohan's 1986 seminal work, Language and Content, and May Shih's TESOL Quarterly article, 'content-based approaches to academic writing'. In the following year, two book-length treatments appeared (CantoniHarvey 1987 and Crandall 1987), the titles of both of which used the term 'content area'. Two years later in 1989, Brinton, Snow \& Wesche (1989) ${ }^{2}$, who remain central contributors in the field, published Content-based second language instruction. Since these beginnings, the use of content in the language classroom has continued to inspire interest (Snow \& Brinton 1997; Valeo 2013; Wang 2013) and criticism (Bruton 2011) both in the classroom and in research. This section first considers the emergence of CBI before evaluating it as a pedagogical approach.

### 2.1. Historical emergence

CBI, in common with all language teaching methodologies, is best viewed as a family of approaches, a fuzzy category (Haack 1996) with links to and overlaps with other approaches. Attempting to define, characterise or operationalise it, then, is a task requiring sensitivity and subtlety. From a historical point of view, Eskey (1997, 132) cites Stern's (1981) 'brilliant, if somewhat neglected paper', which argued for a binary distinction between two types of communicative language teaching, the L-variety (for linguistics) and the P-variety (for psychology or pedagogy), the latter drawn not from an analysis of language but from an analysis of the learning process itself.

A complementary view is given by BS\&W (1989, 5-9), who discuss three traditions which they view as the 'roots of content-based language teaching': language across the curriculum, language for specific purposes (LSP), and immersion education. These traditions emerged out of specific pedagogical and social contexts in various Anglophone countries from the 1960s to the 1980s, and each viewed the relationship between language form and content in different ways. However, they have in common precisely that relationship: that some content, relevant to the learners, is used as a central and controlling principle of curriculum design and perhaps assessment alongside 'traditional' work on language form, which is itself integrated somehow into the content.

### 2.2. Theoretical frameworks

Despite accepting Johns' (1997) observation that no complete theoretical framework for CBI exists, this section will look at three theoretical constructs which lend support to the practice. Firstly, seminal work by Stephen Krashen (see Krashen 1981, 1982) had already established a favourable context for the use of content in language learning just prior to the emergence of the three pedagogical traditions discussed above. All of Krashen's five hypotheses can, in

[^54]different ways, support a content-based approach. The acquisition-learning hypothesis argued for a natural approach (Krashen \& Terrell 1983) to language acquisition that mirrored the effortlessness of L1 acquisition and eschewed form-focused grammar teaching. The natural order hypothesis lent further support to this, taking a strong stance on the notion of a natural order of acquisition for certain language forms, including English functional suffixes (Brown 1973; Dulay and Burt 1974, 1975). These first two hypotheses led Krashen to argue for a monitor hypothesis, the monitor being a cognitive operation which applied consciously learned (in Krashen's technical sense) knowledge to the naturally acquired output. This was done best when the learner was relaxed in Krashen's view (the affective filter hypothesis). Finally, this natural process of acquisition is achieved through appropriately levelled input, $i+1$.

Much if not all of Krashen's work has been questioned; much if not all has been reworked or rejected by others. In the $21^{\text {st }}$ century's proliferation of models and theories, Krashen's early attempt at a unified theory of second language acquisition can appear somewhat simplistic. Nevertheless, his ideas received considerable attention in the 1980s, at the time CBI emerged, providing a theoretical justification for it. The notion of interesting content which is read at the learner's own pace fits snugly into Krashen's definition of input. The reframing of formal language training as sitting alongside and emanating out of the content dovetails smoothly with the connotations of the acquisition-learning hypothesis.

Perhaps foremost among those insights of Krashen that have received further attention, both from Krashen himself and others, is that of the role of extensive reading. In both L1 and L2 contexts, extensive reading has been demonstrated to improve reading ability, vocabulary and general knowledge (West, Stanovich \& Mitchell 1993; Elley 1991). This should come as no surprise: reading is a form of input, and input is a necessary condition for learning. In language learning, as opposed to, say learning to bake a cake, input in the form of reading is widely available and can be tailored to students' interests and needs. Of course, this approach comes with certain caveats, not least that the input should be of the right level, and of interest to the reader. Training may also be needed in vocabulary recording and output tasks which make the use of the input. This, of course, is what a CBI taught course would provide; the emphasis on reading itself, however, is a theoretically secure notion.

Krashen is not the authority he once was. However, the notions of extensive reading and input just beyond the level of the learner have found parallels in other theoretical approaches. For example, contemporary work by Lantolf and associates (see Aljaafreh \& Lantolf 1994; Lantolf 1994; Lantolf \& Appel 1994; Lantolf \& Pavlenko 1995) draws links between CBI and the Zone of Proximal Development (ZPD), a notion proposed but not fully worked out by Lev Vygotsky (1978). Wallace (2015) interprets the notion as follows:
... [when] students, young and old, are given tasks to accomplish that are just beyond their actual competence, but are able to secure the support of others, it is likely that they will be able to manage the task better than if they are left alone to struggle with it.

Wallace $(2015,105)$
The ZPD is an attempt to formalise the intuition that the right help, in the right way, at the right time is better than no help at all. If the reading matter stands as proxy for a human agent who guides the learner into the next proximal zone, the ZPD is a clear echo of Krashen's $i+1$.

As a final theoretical construct, scholars such as Fathman \& Kessler (1993), Slavin (1995) and Stahl (1994) discuss the notion of private speech, i.e. the use of internal monologue for problem-solving and rehearsing, negotiation of meaning. Again this can arise in the context of private extensive reading (as opposed to the more pressured, public environment of seminar discussions or presentations) as a mechanism for driving learners through zones of proximal development, again supported if necessary by peer learning or teacher guidance.

To conclude this section, whatever weaknesses Krashen's legacy may now be seen to contain, the value of private extensive reading of the right type sits easily with other relevant pedagogical constructs. With his concern for input-led teaching, with an emphasis on meaning in context and a clear de-emphasis on (forced) production, Krashen can be seen as the first prophet of CBI.

### 2.3. CBI and CLIL

A brief detour is now made to discuss one particular variety of CBI in addition to the three forms of CBI discussed by BS\&W. This additional instantiation of content-based language teaching has emerged in the European context in the last 20 years. Christened CLIL - content and language integrated learning - in 1994 by its founders, David Marsh and Anne Maljers, it now boasts EU backing, for example in the form of the e-clil initiate (http://e-clil.uws.ac.uk/) and its own journal, the International CLIL Research Journal. It has been adopted by the Cambridge English Teacher Knowledge Test (Cambridge English Online) as one of their specialist modules, and has found favour with the British Council among other educational providers (British Council 2014).

CLIL is often framed within the context of European secondary school education, where the primary focus is content. By contrast, CBI can be seen as an EFL-based language school modality where the primary focus is language. However, the integration of language and content is clear in both approaches. British Council documentation (British Council, op. cit.) make clear that CLIL 'must involve the learning of the language associated with the content' and that through it 'learners are equipped with the language for thinking about the content' (italics in original). Concepts such as scaffolding, negotiation of meaning and the coconstruction of knowledge are key in this document.

Despite its acceptance by various, prestigious educational provides, CLIL has not gone unchallenged. Bruton (2011), for example, is sceptical about some of the positive results in the Basque country. In addition to highlighting methodological concerns and the small size of samples in previous work, Bruton also suggests that ostensibly positive results from a CLIL~non-CLIL comparison experiment, could be interpreted as a function of the higher motivation of the CLIL groups.

### 2.4. An evaluation of CBI

Having traced the origins and some of the theoretical foundations of CBI, we briefly summarise its strengths and weaknesses.

### 2.4.1. In support of CBI

CBI offers a number benefits (linguistic, cognitive and affective and to both learners and teachers). These include the following:
(a) BS\&W p. 9 comment that CBI is particularly appropriate where learners have specific functional need in the second language'. This is the backbone of the CLIL version of CBI discussed above, but remains relevant in subject specific EFL delivery such as the case study in question in this paper.
(b) Eskey $(1997,136)$ discusses CBI's emphasis on the aboutness of language: content in this sense is not merely something to practice language with; rather language is something to explore content with. This reframes language not as goal, but as means, mirroring its use in 'the real world'. In this respect CBI situates itself close to the tradition of task-based learning (TBL) (e.g. Larsson 2001; Prabhu 1987) which frames language in a similarly radical usage-based way.
(c) Kasper (1997) discusses the heightened transferability of language skills gained in a CBI context. Drawing on earlier studies (Anderson \& Pearson 1984; Nelson \& Schmid 1989), she notes that the content schemata which is built up in CBI adds an extra resource for the reader when approaching related texts. The emphasis on form adds learning capital when approaching other texts with similar content.
(d) In terms of motivation, as an input driven approach with a clear de-emphasis on output, CBI both lowers the affective filter (in Krashenite terms) and promotes autonomy and decision-making. In regard to the latter claim, if curricula are designed in such a way that students are able to make some choices as to what is read, CBI gives scope for considered, accountable decision-making, with greater flexibility and adaptability for the student.
(e) CBI can motivate teachers in that it offers them opportunities for personal, professional and intellectual development and greater control over their delivery.

### 2.4.2. Limitations

The implementation of CBI curricula has not gone unchallenged. Lee (2014) offers a postmortem on the use of CBI in Malaysia, an initiative that lasted seven years (2003-2010). Lee contrasts this situation with the ongoing use of immersion CBI in Canada, drawing attention to certain features of Malaysian society which she argues mitigated against the CBI agenda. For example, quoting Swain \& Lapkin (2005), Lee notes that Malaysia's multilingual situation meant that the various learner L1s were 'supposed to be "invisible and inaudible", a situation contrasting considerably with Canada where students' French L1 was not relegated to a position of non-use in the educational model. Lee's other not dissimilar points concern the lack of bilingual or multilingual teachers and the differences between classroom culture and the local L1 community. Lee's criticisms of the application of CBI in Malaysia will not be challenged here. However, it must be noted that the learning context in an Anglophone country overcomes her concerns: students from a range of L1s render teacher bilingualism less relevant.

Other limitations are now briefly listed:
(a) CBI stresses the written mode of language reception and production, downplaying the oral. Similarly, from a learning modalities point of view, there is an imbalance towards visual learners and away from auditory and kinaesthetic learners.
(b) The role of pronunciation (and indeed sound level receptive listening skills) may be underplayed.
(c) The findings of work on the importance of grammatical accuracy (for example the Focus on Form and Focus on FormS approaches (e.g. DeKeyser 1998; Long 1991) sit uneasily with CBI, where the focus on meaning in context, message and content itself frame formal accuracy as incidental.
(d) Assessment becomes more complex as the content must also be assessed.
(e) At the institutional level, current methods of teacher training assume a linguistic focus with language systems and skills at the centre. Teachers may exhibit resistance towards and reluctance to engage with CBI approaches.

## 3. A case study

Having discussed some of the dimension of CBI, we turn now to the case study which forms the centre of this paper. Section 3.1 describes the course 'as was', viewing it as a discrete skills and systems course influenced by the structure of IELTS and the administrative requirements of destination departments. Section 3.2 describes the initial changes towards a CBI-driven course with Section 3.3. discussing ongoing changes in the spirit of CBI. Section 3.4 covers exceptions to the CBI principle before 3.5 looks at future changes.

The initial motivation for what is reported in this article was to modify and indeed improve the delivery of an EAP pre-sessional syllabus. The research question, therefore, was formulated as:
(1) To what extent does a CBI-driven syllabus result in improved delivery of a business-focused EAP presessional, as reflected in student satisfaction and tutor perception?

The conclusions drawn are based on two sets of end-of-term feedback from all students on the course, comments made throughout the course and the author's own (admittedly subjective) impressions of development.

### 3.1. The past

Not unlike CBI itself, the course in question has existed under various names and in various forms for many years. Its purpose has nevertheless remained relatively constant: it is a presessional language and business course designed to prepare international students for postgraduate study in business and management. The current author began teaching on the course in April 2010 and has taught on it, latterly co-directing it, since then for either three or four out of four terms per year.

Until approximately 2011, the course could be appropriately described as a 'skills and systems' design in the sense that reading and writing skills were taught separately, the latter in tandem with a single project. Speaking skills were also a separate strand, assessed through a presentation, listening skills as was grammar and business vocabulary (for which a standard business English coursebook was used). This structure allowed an assessment approach which mirrored the IELTS exam in that students received a mark for speaking, listening, reading and writing as separate components, with grammar and vocabulary as a fifth component.

The primary rationale for this format was the needs of receiving departments in the wider University. Because of their familiarity with the IELTS format, which reports language proficiency in a discrete four skills format (listening, reading, writing, speaking), it was considered appropriate to adhere to this format, and allow it to inform the structure of the course. In short, the motivation was as much institutional as pedagogical. While recognising the motivation for this format, collegial discussion as to the future direction of the course found itself echoing the sentiments of Garner \& Borg $(2005,119)$ that 'skills-based teaching has numerous problems and many programs are now turning to CBI as a means for preparing students for university study in a new language and context'.

### 3.2. Initial changes

### 3.2.1. Setting off

The course has been evolving towards its current state since approximately 2011. Staffing changes along with a growing emphasis on 'academic English' through such organisations as BALEAP, including a wider awareness of its characteristics, led to a series of informal discussions on the structure of the curriculum. Initially, a need was perceived for greater 'academic content' (or, alternatively, academic orientation) in the course and to that end, a greater reliance on primary literature was required. This raised the immediate question of 'what content?'. Two separate influences initially played a role in this selection: a) the themed units of the business vocabulary and grammar textbook which discussed broad topics such as marketing or globalisation; and b) the availability of specialist staff from the University Business School.

In terms of a), then, the first step was to 'flesh out' the vocabulary and grammar textbook with primary literature which in turn gave rise to small scale writing tasks or presentations. For example, the marketing unit was supplemented by, among others, a text on marketing blunders (Dalgic \& Heijblom 1996). Texts such as this treat a particular aspect of the broad topic of marketing in greater depth, follow the conventions of an academic article more clearly, and contain language (collocations, technical vocabulary, grammar structures) which are relevant to future academic study. In this case, the early parts of the article were read in class with an emphasis on noticing, vocabulary recording and text awareness. Students were then askedto write a short summary of the text.

In terms of b), academic colleagues from the University business school (to which the vast majority of students were heading) were asked to deliver a lecture on a particular topic and to
suggest some pre-reading that might be covered in class. One example is a unit of work on counterfeiting which used two articles suggested by the academic colleague in addition to this individual's lecture.

At this point, the course could not yet be described as content-based. It was conceptualised as a language- and skills-driven course with certain mini-projects that had a higher degree of specialist content and as such something of a half-way house. Student feedback indicates that these innovations were clearly successful: students commented on the presence of a specialist lecturer noting in many cases a positive attitude to the focus which this brought; staff then felt empowered to add to the material brought by that lecturer. The decision was therefore taken to increase the influence of this content and as such in late 2012, the course first began to gather together themed units for a CBI delivery from January 2012. Time was given by the institution to initiate this and two staff, one of whom was the author, worked on developing content-driven units of work.

### 3.2.2. Steps taken

The following summarises the steps taken in the subsequent transformation of the course, a process conducted largely by the author in consultation with the co-director. The vast majority of these decisions were 'judgement calls' of a largely intuitive nature, based on a broad-brush understanding of the CBI literature applied to the specific context of the course. The process itself (to be detailed in the next section) seemed very natural and intuitive, something which the author now sees as a defining characteristic of CBI materials production.

## Step 1:

Selection of theme descriptions on the basis of a) the language / grammar coursebook themes; b) availability of specialist staff from the Business School; c) felt levels of confidence and competence by teaching staff.

Comment: The process confirms the insights of CBI writers that the competency of staff is a key factor in determining what is taught and from what sources. As the above indicates, practicalities impinged on the decision of what to teach.

## Step 2:

Collection of relevant texts; reading to learn; initial formulation of learner outcomes and assessment questions.

Comment: As BS\&W (1989) state, the selection of texts is critical. The principles detailed below emerged. However, none of these principles is unbreakable and each must be weighed against the other. Moreover, the balance of factors changes as learners develop (see also 4.3 below).
(i) It was decided that a range of business texts should be used: academic articles, companyproduced reports, and interviews or presentations from reputable sources such as TED. Range implies variety and allows exposure to different genres.
(ii) Texts should be realistic (manageable) in length: texts must not be too daunting for preprogram students; a lengthy text of 20 or more pages is simply too much to allow meaningful engagement. In Krashenite terms, mere length raises the affective filter. Length is thus framed as a continuum, with longer texts being introduced later. However, selected sections of a lengthier text can be used thus allowing learners exposure to longer texts in principle.
(iii) Texts must have clear sections. This aids the development of support materials and renders the text less threatening in that certain 'whole' sections can be discarded. Pedagogically, this is an effective way (into/of) teaching the practice of selectivity in reading.
(iv) Texts should be readable and recent. Texts older than 10 years were in general avoided, although 'seminal' texts of more than decade's age were occasionally included.
(v) Texts should be relevant to each other and relate to each other conceptually so as to create a coherent conceptual terrain and (therefore) allow the writing of an assessment question. This conceptual relationship can be achieved in various ways: texts can build upon each other, echoing each other's central concepts; alternatively texts can present clearly different points of view, creating a 'pros and cons' conceptual structure; finally, texts can relate in a highly implicit manner to each other. All three of these combinations and variations upon them have been tried, and each has been observed to challenge students in different ways. Discussion of the nature of the relationship has proven to be an engaging classroom activity.
(vi) Texts should be academically appropriate: what counts as a source has been found to be a major element of development for pre-sessional students. Often Google scholar is initially seen as a sufficient search tool and students are reluctant or do not see the point of using the University (online) library to acquire peer-reviewed work. The sustained exposure to a range of academic and academic-related texts has appeared to be a highly inductive way of challenging these assumptions.
(vii) Varied use has been made of the following types of text: academic articles from peerreviewed papers; company documentation in the form of reports and marketing material; 'prestigious' business journalism, primarily from The Economist; and other relevant business media. Adherence to this principle facilitates exposure to a wide range of different genres of text and style, which in turn invites certain text- and languagerelated activities on the relationship between text and language form.
(viii) In later units, learners are given freedom to select some texts for themselves. This principle of 'core texts first; own texts later' fulfils the learner autonomy potential of CBI in a structured fashion. Nevertheless, guidance was still required for the majority of students.

## Step 3:

Scheduling, sectioning, skills, systems and assessment
Comment: This was the most difficult stage both procedurally and conceptually. Having selected a set of texts, not only must they be ordered, and materials produced to support
learners through the texts, but assessment tasks must be created which reference the content. After some experimentation with different formats and exercises, it was decided that a pack of support materials covering a broad range of textual and response tasks should be produced. The sections of the text were used to guide materials, and within this principle, at the risk of oversimplifying, two broad types of support materials were created:
(a) Certain key sections of texts such as abstracts or introductions were subjected to intensive exploitation for structure, language and meaning. Typically, learners might be asked first to match section headings to a multi-paragraph text, secondly, to identify key phrases in the text, thirdly, to respond to comprehension questions on the section, and fourthly, to either discuss or write a short summary. Through these means, elected key sections were felt to be relatively comprehensively covered. It was also made clear to learners that the range of tasks also acted as a self-study 'menu' for their own reading. It is a question for further research within CBI as to what extent the provision of such a 'text-attack activity menu' leads to more effective independent study.
(b) In direct contrast to the above, the materials for some sections were simply light-touch, broad-brush prompts aimed at encouraging independent note-taking. Prototypical sections for this approach were thematically connected within the text, e.g. lists of advantages and / or disadvantages. This mode of materials support was therefore often used for sections 'after' guiding or heading parts of the text which would be supported with a)-type materials, above.

At a practical level, one of the lead tutors on the course, the current author, produced the vast majority of the materials, while the other periodically acted as 'devil's advocate'. This division of labour was found to be highly productive.

### 3.3. Ongoing changes

The previous section covered changes that have taken place to date, which have shifted the course in question from a discrete skills and systems structure to a CBI course. We now consider two ongoing changes before noting elements that remained unchanged from the previous format, as well as future changes.

### 3.3.1. Addressing the written production accuracy and grammar syllabus deficits

A common criticism of CBI-style programmes is a lack of focus on grammar, specifically grammatical accuracy. This assumes, of course, that the systematic classroom-based teaching of grammar is a worthwhile enterprise, a viewpoint that has been challenged (Thornbury 2005; Truscott 1996). Valeo (2013) argues for the positive effect of a FFI / FoFs supplement to a CBI course. She notes $(2013,26)$ that grammar teaching in CBI has been noted to be ad hoc and unsystematic. In an attempt to address this, in developing the course, the 'classic' CBI approaches to systematic grammar teaching were considered. These included the following:

- As an application of Schmidt's (1990) noticing hypothesis, relevant academic English structures in the texts (e.g. relative clauses, noun-noun compounds) were identified and their use in the text analysed. However, this was done on a text-driven basis, with reference to the language in context and rarely (although see below) were individual constructions taken out of context and practised.
- When time allowed, certain of these were practised using traditional teaching techniques. For example, with relative clauses, learners might be asked to produce a paragraph including two or more relative clauses. The paragraphs, of course, might be on a topic or theme not dissimilar to the content. For weaker students, an example paragraph in one of the texts might be used as a springboard and the learner asked to complete a paragraph in a slightly different way.

It was felt that these approaches were at least partially successful in addressing a possible (Focus on Form(S)) grammar deficit. In addition to using these approaches, however, it was made clear that the CBI approach taken was not a grammar approach and that copious grammar books were available in the language study area. Feedback, both throughout and at the end of the course, largely confirmed this with a number of positive comments on the grammar-lite approach.

### 3.3.2. Online journals

In 2013, a decision was taken to include online journals on the course with students being asked to contribute one entry per week. During the academic year 2013-2014, these were framed as open content journals: students could write whatever they wanted. Uptake was fair but variable: stronger or more motivated students approached this task enthusiastically, often writing more than one entry per week, and in some cases, very long ones; others were (or did you mean 'less') reluctant.

To address this, a number of changes were implemented for the academic year 2014-15. Firstly, tutors were more confident about the delivery and therefore this component of the course may have been 'sold' to the students more effectively. Secondly, a report style was required and two examples were given to students at the beginning of the course. This set the text-type of the journal entry and arguably gave the students greater confidence in approaching the task as a result of having a model. Thirdly, the content was more tightly defined. In line with Corbett (2003), the journal entries were framed as reports on cultural engagement. Students were given a list of possible cultural exploration activities and required to write about these.

### 3.3.3. Ongoing adaptation of the texts

As has been suggested, in the early stages of the re-writing of this course, a certain degree of control was imposed on the conceptual domains. This was partly for the benefit of tutors, including the current author, in order to allow a smooth delivery of the content-based modules. After the first year's delivery, however, tutors felt considerably more comfortable
with the content and had grasped some of the central themes of the units. Moreover, tutors had had time to research other possible articles. As such, although the titles of the units remained the same, in many cases, texts were substituted and materials were re-written. The current author found this ongoing process highly motivating as the content of the course was slightly different (and better) in the second year.

### 3.4. Elements left (partially) unchanged

Despite the radical re-write of the course in question that this paper discusses, tutors on the course felt from the beginning that some elements of an intensive delivery should be independent of the topics and themes covered in the CBI input. To this end, the presentations component (of two hours per week) was 'left alone' as a skills course with a strongly personalised focus. Historically, this component has consisted of skills and language work taking a relatively traditional format. The availability of familiar resources also mitigated against a radical overhaul. It is generally felt that this decision has worked well. Encouragingly, however, on one or two occasions, it was still felt useful to capitalise on the content introduced through the wider course.

### 3.5. Future changes

At the time of writing, two very different changes are being discussed. One concerns the length of the theme-based units. Currently set at two weeks of real time (equal to 12 hours of input and a variable number of additional hours of self study), the issue of extending this time to three weeks has been discussed. The additional time offers the following potential benefit:
(a) More time to dig deeper into the themes and core concepts. Both a larger domain of content can be covered and, perhaps more importantly, there is time for revision of earlier content. By contrast, in the two-week delivery, it was felt that there was a 'rush' to get 'through' enough content to merit an assessment task.
(b) More time for drafting and redrafting of the written assessment tasks. This is a key element of any writing syllabus, even more so in a CBI context, where the content for a weaker student may need revisiting and for a stronger student can be developed and extended.
(c) More time for 'mini-writing tasks' which enable contextualised and content-relevant language practice. Rejecting a hard version of Krashen's input hypothesis, thisapproach to content-language integration is the one currently favoured by course deliverers who seen it as the best response to Valeo's (2013) concerns about the ad hoc nature of the teaching of formal systems.

## 4. Implications for second language learning practice and theory

Having presented the case study in detail, we now draw some lessons for second language classroom learning.

### 4.1. The institutional autonomy of pre-sessional courses

The reader will recall that the precursor to the current course was given institutional shape by the perceived requirements of adherence to an IELTS format for reporting student scores to receiving departments. The application of CBI here can be seen as a institutionally political move in that the course was reframed around a language learning pedagogy not around the institutional requirements of receiving departments. This, of course, renders the reporting of scores an administratively and communicatively more complex task, but also serves to position Language Centres as autonomous entities within the wider University.

### 4.2. The teaching of lexico-grammar

CBI reframes language teaching in a counter-intuitive way by making the content, not the language per se a joint (if not the ostensibly main) focus of delivery, curriculum design and assessment. By de-emphasising language as a system and treating it for what it is in the real world, a mode of communication, there is a loss of 'control' over the grammatical aspects of the curriculum. This raises the profound question of how grammar can be taught and assessed in a CBI framework. As discussed in 3.3.1, this issue has not yet been resolved in the course in question and remains an ongoing focus for action research and reflection. This section presents a brief overview of the place of grammar teaching in a CBI course.

Traditional approaches to teaching grammar include grammar translation and grammar based exercises, with the grammar subsystems (alongside lexico-grammatical constructions such as collocations or idioms) presented through texts. The communicative language teaching syllabus has taken a similar view of grammar with 'units' of discrete grammar input. Classic approaches to CBI continued to conceive of grammar teaching as an explicit accompaniment to the content. In this case study, few attempts were made to introduce traditional, systematised grammar units alongside the texts. Instead, 'grammar' as discrete subsystems was largely rejected and constructions-in-context accessed through a noticing approach was adopted.

### 4.3. The 4Ts: topic, theme, text and task

### 4.3.1. Exploiting texts

Skills and systems syllabuses tend to view texts in isolation from each other. A text is chosen and a subset of language work tasks and / or reading (and possibly writing) activities are undertaken based upon it. In the case of language analysis tasks, the content of the piece may
be irrelevant. In the case of reading and writing tasks, the text must stand more central. However, the surface or superficial meaning of the text may be emphasised at the expense of personalisation, response and critique, eschewing the deeper processing or individual approach that 'lingering' with the texts allows. Most concerning, a glance at the standard language textbook demonstrates that skills and systems approaches 'hop' from text to text with minimal concern for content continuity. The approach argued for here shifts the central principle from language and skills to content per se. If language is primarily meaning and meaning is in part meaningfulness to the learner, then content receives a much more important role.

### 4.3.2. Developing awareness of conceptual networks

CBI is content driven: the content as a set of concepts sits at the centre. The concepts themselves are found in the interpretation of a number of sources, texts or aural material. As such, there are a number of possible configurations which the concepts embodied in the texts can take. For example, if the topic is renewable energy, the first text might list a number of advantages to a range of types of renewable energy. The second text by contrast might list and discuss a number of disadvantages. This is one, fairly simple, possible conceptual structure. With these two texts, a short unit of work can easily be conceived. However, this configuration is fairly simplistic and does not mirror the more complex and implicit configurations that a postgraduate student is likely to face. Other configurations include multiple case studies around a central principle or opposing interpretations of a theory.

Naturally, content itself will determine the nature of the conceptual links; indeed, an important lesson drawn from the current case study is that perceiving the 'conceptual heart' of a particular domain of study is among the most challenging tasks of the CBI curriculum writer. Given this, and the time constraints (using the two week model suggested here), it is possible that most CBI courses are unlikely to be able to match the conceptual complexity of post-graduate study; however, as a pre-sessional course, the learning benefit of working with multiple texts which relate to each other in conceptually complex ways is clear and was mentioned in some student feedback as a positive.

### 4.4. Teacher competency

Teacher attitudes and knowledge are often cited as a potential barrier to the implementation of CBI (Cammarata 2009). This is unfortunate as the opposite is true: CBI is an opportunity for teacher development. Resistance to the method is not uncommon and confusion about it is rife. However, the fact that locating suitably qualified teachers, or at least, teachers with an understanding of the demands of a CBI-driven course, poses problems for course leaders and institutions may reflect on the initial teacher training programmes and continuing professional development, not on teachers themselves. Many common initial teacher training programs focus narrowly on some of the classic 'Cs' of language teaching: coursebooks, classrooms, coloured card and not the wider 7Cs (Kirkham 2015) including content. This
institutional shift is not an easy one to make. The case study here, however, has advanced the claim that such a transition can be made with the right combination of confidence and curiosity, teamwork and time and that this transition can be the source of professional and personal growth.

### 4.5. Assessment

Not unrelated to teacher competency is the question of assessment. Skills and systems approaches lend themselves more easily to objective assessment through gap-fills and comprehension-based reading texts. This case study made exclusive use of essay style written response tasks. The author's experience from this case study was that creating workable assessment tasks from the content is a time consuming and complex process. It is best approached by the materials designer writing a possible essay themselves, a strategy which has the added benefits of: a) constituting a self-checking process for the materials writer as to their understanding of the content; and b) highlighting for the materials writer any content- or text-specific issues the learners may have, which in turn motivates the creation of materials which may address any such specific learning gaps.

### 4.6. Not running before you can walk

A final observation concerns the manner in which the syllabus was created. The transition began from a place of considerable familiarity with the students and the course. The course was small (c. 15 students) and was led by two individuals with a strong working relationship. The author therefore concurs with the advice and caveats in the teaching training literature (see Kaufman 1997; Peterson 1997) that the creation of a CBI course will not simply happen and that certain critical pre-conditions need to be in place. As has been suggested above, the process is inevitably time-consuming and intellectually demanding but by that very token results in the emergence of a set of relatively specialist CBI materials and curriculum design skills for the individual(s) who undertake it. As such, for an institution which wishes to move to a CBI delivery, it may be of value to consider identifying one or two individuals to take forward the process as opposed to any such shifts being a 'whole-staff' initiative. Finally, on the practical side of things, the experience of the current author was that materials design and the teaching of those materials could not be separated; the entire enterprise was inherently dialectical in nature.

## 5. Conclusion: content with content?

This article has argued that the CBI revolution of the mid-to late 1980s represents a genuine innovation in adult second language learning, which frames language learning in a sociocognitive usage-based framework. Evidence was marshalled from a range of theoretical perspectives to underpin this. An extensive case study was then presented which argued for the effectiveness of the approach in the context in question, a discipline-specific pre-sessional
academic English language course. Student feedback was very largely positive, teaching staff were highly motivated: the course worked.

Does this mean that the language teaching profession should be content with contentbased instruction? Broadly, yes. But, entirely? Probably not. The case study has suggested that the very creation of a CBI course is a demanding task, as is its delivery, and experience has shown that not all stakeholders in the industry; learners, teachers, management, are ready for it. Furthermore, it is not a cure-all and cannot always trump the real need for some kind of instruction on form per se, accuracy and other concerns. In section or example 3.4 it was argued that a largely CBI course should have elements which are separate from the content. The systems and skills aspects of delivery were of course not abandoned: noticing and practising structures and paragraph development remains at the centre, albeit led and framed by a content. CBI, is, then, very much a language teaching pedagogy: it is not content lecturing, but teaching language through content. However, done well in the right context, it leaves both teachers and students feeling content. With content.

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# Is there a method in this... madness? On variance between two manuscript copies of a Middle English Psalter ${ }^{*}$ 

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#### Abstract

The objective of the paper is to determine the extent and the possible sources of the intertextual lexical variation between two manuscript copies of a single Middle English Psalter known, among other names, as the Middle English Glossed Prose Psalter. The purpose of the paper can be understood only if one approaches the variance from a medieval perspective on text with respect for the inherent features of manuscript culture and an understanding of the exceptional character of the text analysed in the study, which topics are briefly discussed within the paper. The extent of the variance is measured in relation to the nominal choices attested in the two copies of the text, the rationale behind the variation being sought separately in each case, taking into account the contextual intricacies of all the occurrences of the nouns under analysis.


Keywords: Middle English Glossed Prose Psalter, lexical variance, manuscript culture, medieval Psalter

## 1. Introduction

The purpose of the present paper is to determine the extent and the possible sources of the intertextual lexical variation between two manuscript copies of a single text known in the relevant literature under different names ${ }^{1}$ but referred to within the confines of this paper as the Middle English Glossed Prose Psalter. Were it not for the presence of the word manuscript in the previous sentence, the objective of this study could seem to defy logic, which it, however, does not. It is, nevertheless, difficult to attain as it requires of one to adopt a medieval perspective on book with respect for the inherent features of manuscript culture and an understanding of the exceptional character of the text analysed in the study, both of which are discussed in some length in the body of the paper. It needs to be stated already at this

[^55]point that the nature of manuscript culture is a factor which created conducive conditions for the presence of the lexical variation between the copies of the text analysed here and thus shaped the ground for the present study.

That it is now difficult to imagine how copies of the same text can differ in their lexical layer, and to some extent syntactic one too, can - to resort to an enormous simplification - be ascribed to the invention and the subsequent influence of the printing press. However, before the introduction of the printing culture, things used to look very different and it is impossible to discuss lexical variance between manuscripts without a brief overlook of the pre-print situation (Section 2) as it is against this backdrop that one needs to set the texts discussed in this paper. A short presentation of the texts themselves follows in Section 3. Having discussed the background, I will proceed to the methodology of the research (Section 4), followed closely by the study itself (Section 5), whose results are discussed in the final section (Section 6).

## 2. Manuscript culture

The extent of the variation that can be observed between different manuscript copies of the same medieval text leads one to believe that at the very core of the manuscript culture lies acceptance of variation, ${ }^{2}$ which seems to be in dissonance with the resistance shown in the Middle Ages to 'change in and for itself (Nichols 2011: 1). Nichols (2011) argues for 'mutable stability' which would help to handle this paradox, not forcing one 'to choose between a concept of the work "as somehow above or beyond any manifestation of it," and "the work-that-has-its-being in a given manuscript version"'. For Gellrich (1985), the former approach conveys the concept of the necessity of idealising books which arose out of the material and individual nature of each manuscript: it needed to be seen as an imperfect reflection of an imagined perfect text it represented, as an 'exemplar of a logocentric book-beyond-the-books' (West 2006: 246). On the other hand, the variance between the manuscript copies testifies to each of them being an independent work (Nichols 2011). Thus, medieval manuscripts do represent the same text but the term sameness in the Middle Ages could not be equated with exactness (Nichols 2011:3) and the procedure of establishing an authoritative critical edition is a consequence of applying the modern idea of the book to the products of the medieval reality, without taking the latter into consideration: ${ }^{3}$

[^56]the modern critical edition, however erudite and however useful, could not be a faithful representation of an original, but was, rather, a modern reconstruction of an ideal, that from our perspective, never existed. It might evoke the historical moment, but was in no sense of it.

For these reasons, 'rather than seeing scribal literary transmission over time as adulterating the works they addressed' (Nichols 2009: 5), the multiplicity of versions could be interpreted 'as betokening an active milieu of reproduction that could only be called interventionist' (Nichols 2009: 6). Leaving their mark upon the work a scribe was copying was unavoidable and it was not expected of the scribes to avoid it (Nichols 2014: 2). Thus, what is often perceived as negligence should rather be considered a reflection of the socio-cultural context in which the manuscripts were copied and of the care accorded to the work. '[T]echnologies of manuscript reproduction had a dynamic impact in shaping the nature of the work' (Nichols 2009: 5-6). Liuzza (2000: 146-148) would see such scribes as performing an aural transcription and not copying the text literatim, which would result in reproducing the original text exactly as it was represented (visual transcription). An aural transcription, on the other hand, would be the copying of a text read and thus heard and kept in mind. It would transmit not the shape but the sense. Orthographical variation - as a consequence of phonological changes, orthographical innovations and dialectal differences - is not the only sort of variance that stems from this approach. A more conspicuous change can be observed in the area of syntax and of lexicon, the latter being the focus of the present research. As Liuzza (2000: 147) phrases it:

> In more extreme cases, the aural transcriber may replace an obsolete word, correct a passage that he or she deems faulty, or change for better or worse a phrase that does not survive the translation from his or her mind to the page. In these cases the scribe is interpreting rather than transcribing; one might even call this work 'editorial'.

In the light of the above, one should perceive the scribe to be a co-author of a text or a translation rather than a transmitter simply, an intermediary granted the right to participate in the creation of the work.

## 3. The Middle English Glossed Prose Psalter

Since it is a commonplace that all manuscript copies differ, the presence of the divergences between the copies of the Middle English Glossed Prose Psalter (MEGPP) does not surprise and does not prevent one from perceiving them as representing the same text. However, the

[^57]manner in which they differ, especially taking into account what (little) is known about them, provides a strong incentive to investigate the issue.

MEGPP is preserved in only four manuscript copies of which the first two are analysed here: London, British Library, MS Additional 17376 (MEGPP L); Dublin, Trinity College, MS 69 (MEGPP D); Cambridge, Magdalene College, MS Pepys Library 2498; and Princeton, Ms Scheide $143 .{ }^{4}$

The relationship between the different manuscript copies of MEGPP is not straightforward. It is stated by Black and St-Jacques (2012: lv, part 1) that although the London manuscript is the oldest by the date of its composition - 1330-1350 (Black and StJacques 2012: xxviii, part 1, after Hanna 2003: 144), it is the Cambridge copy that is most probably the closest to the English original. Since, as shall become clear, the texts are not copies of one another, Black and St-Jacques (2012) postulate the presence of now-lost archetypal text copies of which started to diverge creating as if two branches. The first of these is now represented by the Cambridge text, derived as if independently (Black and St-Jacques 2012: lii, part 1, after Hanna and Lawton 2003: lxxxvi), whereas the other underwent even further subdivision leading to the composition of the London manuscript on the one hand and the Dublin and Princeton copies on the other. Such a complex web of relationships between the text envisaged by Black and S-Jacques (2012) stems from the characteristics of each of the manuscript copies.

Despite the fact that relatively little is certain and agreed upon with respect to MEGPP, there is no doubt that its most characteristic feature are the glosses whose readings often replace the original Latin lemmata. In fact it is the nature of the glosses and their treatment in the four manuscripts that to a great extent enabled Black and St-Jacques among other scholars to draw the conclusions concerning the intertextual relations between the manuscripts. Both the Cambridge and London manuscripts incorporate the readings of the gloss into the translation without rendering the lemmata, whereas the usual practice for the Dublin and Princeton manuscripts is to translate both the lemma and the gloss. Based on the number of the glosses present in the London and the Cambridge manuscripts, Black and St-Jacques (2012) regard the two as closer to the original.

Moreover, a linguistic analysis of the texts also prompts one to consider the Dublin and Princeton manuscripts as further from the Latin exemplar due to their use of less learned language, which is 'closer to everyday speech during a time when English became less influenced by Latin and French' (Black and St-Jacques 2012: liii, part 1). What is especially important in the context of the present research is the fact that both these manuscript copies employ fewer Latinate words than the Cambridge and the London manuscripts do, which leads Black and St-Jacques (2012: liii, part 1) to believe that they are 'from a later, truncated, and simplified version with fewer Latin and French words'. ${ }^{5}$

[^58]Another factor which renders the situation still more complex is the presence of a French intermediary which the English translator had at their disposal and which to some extent influenced the shape of the English rendition. ${ }^{6}$ The treatment of the glosses in this translation mirrors the situation described for the London and the Cambridge manuscripts. The text of the French glossed Psalter is preserved in Paris, Bibliothèque nationale, MS fonds français 6260 (a 15th-century copy of a 13th-century text according to Berger 1884) and, as reported by Sutherland (2015: 120-135), in London, British Library, MS Additional 44949 (14th century). It needs to be borne in mind throughout the paper that the time gap between the French extant manuscript copy/copies and the ME manuscripts of MEGPP (MEGPP L dates to the middle of the 14th century and MEGPP D to the close of that century) may distort the results obtained in the research.

## 4. Methodology and the data

MEGPP in the two manuscript copies analysed here is the focal point of the present study. Yet, as is already evident on the basis of the information provided in the preceding section, the research could not dispense with taking into account also the Latin and the French texts. Whereas the ME Psalters analysed here are taken from Charzyńska-Wójcik (2013), who used Bülbring's (1891) edition as the basis, and juxtaposed with Black and St-Jacques' (2012) edition, the French Psalter used in the process of the research came in the digitised manuscript form which was compared with its text presented in Black and St-Jacques (2012). Since no edition of the complete Latin text of the glossed Psalter is available, Black and St-Jacques (2012) providing only the glossed verses, it was necessary to use, for the purposes of the study, the text of the standard Gallican Psalter, also as available in Charzyńska-Wójcik (2013). This Latin text constituted the first step in the preparation of the database since using the underlying Latin as a point of departure allowed me to compare only the parallel lexical items in all the relevant Psalters and to determine which readings in the translations were non-standard despite the fact that they are not signposted as 'glossed' in Black and St-Jacques' (2012) edition.

The study concentrates exclusively on nouns in the first 50 Psalms, with occurrences of the same Latin lemma grouped under one headword, comparing only the parallel items in all four texts, i.e. the Latin, French and two ME Psalter copies. ${ }^{7}$ Since the shape of the Latin text determined the number of the lexical items analysed in the study, the complete database contains 2877 Latin nouns, with proper nouns excluded, and the items corresponding to them in the translations. As might be expected, not all 2877 Latin nouns find nominal equivalents in the renditions: gerunds, adjectives, nouns and whole phrases are used at times to convey the

[^59]notions expressed by nouns in the Latin text. Additionally, there are also such Latin items which do not find corresponding lexical items in the renditions for a variety of reasons ranging from the manuscript being damaged, through scribal omission, to the heterodoxy of the translation. All such cases are duly recorded in the database. In the next stage of the research I limited my study area to the divergent cases, whose number equals 275. However, not all of the cases were subject to further analysis as only 145 , representing 70 distinct Latin lemmata, met all the methodological criteria established for the purposes of the study, i.e.
(i) they were nouns according to the labels provided in the Middle English Dictionary and the Oxford English Dictionary,
(ii) they were not the renderings of the Latin glosses: due to the divergences in the treatment of glosses between the manuscripts of the text and to the fact that I do not have at my disposal the original Latin text from which the Middle English Glossed Prose Psalter was rendered I could not analyse these cases.

Additionally, also divergences in the renderings of the nouns Deus, Dei and dominus, domini have been disregarded as due to the fact that the base Latin text is not available in any edition in its entirety and taking into account the variation between different copies of the Gallican Psalter as regards the use of the two nouns, it would be impossible for me to determine with any certainty the reasons for the divergence between the two manuscripts of MEGPP with respect to those lexical items.

Since any study which aims at determining the reasons for the intertextual divergences in lexical choices necessitates taking into consideration the context in which these occur, I needed to analyse the data I obtained from the perspective of the number of occurrences each Latin lemma has in the body of the first 50 Psalms as all of these had to be scrutinised. This procedure enabled me to further narrow the database as the analysis of low frequency items had to be limited to an observation of the formal similarities between the Latin, French and ME items: the presence of a formally similar item in either of the remaining texts might have encouraged the use of a given ME noun, either a cognate to the former or a borrowing. The study proper is discussed in the following section.

## 5. The study

### 5.1. All divergent cases

All the divergent pairs of items, along with the Latin lemmata and the nouns employed in the French Psalter, are presented in Table 1 below. The table provides the verse number (column 2) in which the diverging lexical choices occur, the Latin lemmata along with the number of the occurrences analysed, i.e. only those occurrences which fulfil the methodological criteria are taken into account here (column 3), the ME items employed in MEGPP L (column 4) and MEGPP D (column 5) as well as the renderings used in the French translation (column 6). The final column provides the information as regards the potential influence exerted either by the Latin original or the French Psalter on the lexical choices in MEGPP, focusing on the formal similarities between the nouns employed in these four texts. The items to which the
information relates are italicised. The nouns presented on the grey background ( 33 distinct Latin lemmata) are those whose low number of occurrences prohibits further contextsensitive analysis. ${ }^{8}$

Table 1: Divergent cases

| $\mathrm{N}^{\text {o }}$ | Verse | Latin and $n^{0}$ of valid occurrences | MEGPP L | MEGPP D | French | formal influence |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | 49.19 | adulter, adulteri (1) | spŏuse-brēker(e | ?* wanter(e | avoutire |  |
| 2. | 31.4 | aerumna, aerumnae (1) | (!) ${ }^{9}$ caitiftē | mischēf | chetiveté | French |
| 3. | 9.24 | anima, animae (50) | soul(e | herte | ame |  |
| 4. | 13.5 | aspis, aspid[i/o]s (1) | aspide, nāddre | nāddre | serpent | Latin |
| 5. | 21.19 | auxilium, auxili(i) (3) | hēlth(e | help | aide |  |
| 6. | 38.3 | bonum, boni (10) | gōd | gōdnes(se | bien |  |
| 7. | 13.11 | captivitas, captivitatis (1) | caitīfnes(se | thraldōm | chetiveté | French |
| 8. | 3.7 | causa, causae (4) | enchēsŏun | cause | cause | French and Latin |
|  | 9.4 |  |  |  |  |  |
| 9. | 19.8 | currus, currus (1) | carre | cart | chariot |  |
| 10. | 2.12 | disciplina, disciplinae (4) | disciplīne | lōr(e | discipline | French and Latin |
|  | 49.18 |  |  |  |  |  |
| 11. | 9.29 | dolus, doli (8) | trecheri(e | gīle | tricherie | French |
|  | 14.3 |  |  |  |  |  |
|  | 23.4 |  | gīlerī(e |  | deçoite |  |
|  | 31.2 |  |  |  | decerte / deçoite |  |
|  | 33.13 |  | trecheri(e |  | barateur |  |
|  | 34.23 |  |  |  | decerte(s) / deçoite |  |
|  | 35.3 |  |  |  |  |  |
|  | 49.20 |  |  |  | tricherie | French |
| 12. | 10.5 | filius, fili (18) | chîld | sŏne | enfant |  |
| 13. | 18.4 | finis, finis (14) | cŏntrē(e | ēnde | part |  |
| 14. | 36.21 | fumus,fumi (2) | smōke | smēk(e | fumee \} |  |
| 15. | 36.8 | furor, furoris (1) | wōdship(e | wōdnes(se | desverie |  |
| 16. | 9.28 | generatio, generationis(5) | kīnde | kin | generation |  |
|  | 9.28 |  |  |  |  |  |
| 17. | 3.3 | gloria, gloriae (21) | glōrīe | joi(e | joie | Latin (L) vs. French (D) |
|  | 7.5 |  |  |  | gloire | French and Latin (L) |
|  | 8.6 |  |  |  |  |  |
|  | 16.17 |  |  |  |  |  |
|  | 18.1 |  |  |  |  |  |
|  | 20.5 |  |  |  |  |  |
|  | 20.5 |  |  |  |  |  |
|  | 23.9 |  |  |  |  |  |
|  | 23.10 |  |  |  |  |  |
|  | 25.8 |  |  |  |  |  |
|  | 28.2 |  |  |  |  |  |
|  | 28.2 |  |  |  |  |  |
|  | 28.8 |  |  |  |  |  |
|  | 29.15 |  |  |  |  |  |

[^60]|  | 44.15 |  |  | joie |  | Latin (L) vs. <br>  <br>  <br>  48.15 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 48.17 |  |  |  | French (D) |  |

[^61]|  | 10.7 | $(7)^{13}$ | drōpe |  | lacs |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 17.6 |  | trappe |  |  |  |
|  | 24.16 |  | gnāre |  |  |  |
|  | 30.5 |  |  |  |  |  |
|  | 34.9 |  |  |  |  |  |
|  | 34.9 |  | (!) ${ }^{14} \mathrm{gnāre}$ |  | - |  |
| 35. | 1.2 | lex, legis (8) | wil(le | laue | loi |  |
| 36. | 23.3 | loc[us/um], loci (8) | stēde | plāce | lieu |  |
| 37. | 37.7 | lumbus, lumbi (1) | (!) ${ }^{15}$ ? bak | lēnd(e | rein |  |
| 38. | 17.46 | lutum, luti (1) | lōm | clei | boue |  |
| 39. | 14.2 | macula, maculae (1) | wem | sinne | tache |  |
| 40. | 44.6 | mansuetudo, mansuetudini (1) | softnes(se | mēknesse | debonnaireté |  |
| 41. | 38.4 | meditatio, meditationis(3) | thought | mīnd(e | pensee |  |
|  | 48.3 |  |  |  |  |  |
| 42. | 25.7 | mirabile, mirabilis (3) | merveille | wŏnder | merveille | French |
| 43. | 50.2 | miseratio, miserationis (3) | pitē | mercī | merci | French |
| 44. | 11.5 | miseria, miseriae (1) | caitiftē | wrecchednes(se | chetiveté | French |
| 45. | 23.3 | mons, montis (12) | mŏuntain(e | hil(le | montagne | French |
| 46. | 9.25 | multitudo, multitudinis (9) | muchelhēd(e | muchelnes(se | multitude |  |
|  | 32.16 |  |  | grētnes(se |  |  |
|  | 48.6 |  | muchelnes(se |  |  |  |
|  | 50.2 |  |  |  |  |  |
| 47. | 17.53 | natio, nationis (1) | cŏntrē(e | nāciŏun | nation | French and Latin |
| 48. | 30.14 | $\begin{aligned} & \text { obprobrium,obprobri(i)/ } \\ & \text { <opprobrium,opprobri(i } \\ & ) \gg^{16}(3) \end{aligned}$ | reprōche | reprēve | reproche | French |
|  | 38.12 |  |  |  |  |  |
|  | 43.15 |  | (!) ${ }^{17}$ reprōche |  |  |  |
| 49. | 48.4 | parabola, parabolae (1) | parāble | ensaumple | parole | Latin |
| 50. | 15.5 | pars, partis (2) | part | pārtī $e$ | part | French and Latin |
| 51. | 9.19 | patientia, patientiae (1) | sufferaunce | pācience | patience | French and Latin |
| 52. | 14.6 | pecunia, pecuniae (1) | trēsŏur | monei(e | avoir |  |
| 53. | 23.1 | plenitudo, plenitudinis (2) | plentē | plentēvŏusnes(se | - |  |
|  | 49.13 |  | fulnes(se |  |  |  |
| 54. | 46.3 | populus, populi (23) | folk | nāciŏun | peuple |  |
| 55. | 2.6 | praeceptum, praecepti <br> (3) | commaundement | hēst(e | commandement | French |
|  | 18.9 |  |  |  |  |  |
| 56. | 17.3 | salus, salutis (15) | hēlth(e | help | force |  |
|  | 26.1 |  | help | hēlth(e | salut |  |
|  | 32.17 |  | hēlth(e | help | santé |  |
| 57. | 23.5 | salutare, salutaris /[salvator, salvatoris $]^{18}$ (15) | help | hēlth(e | sanctité |  |

[^62]| 58. | 46.8 | sedes, sedis (3) | sēgğe | sēte | siege | French |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59. | 8.8 | semita, semitae (7) | bī-stī | pāth | sente |  |
|  | 16.6 |  |  |  |  |  |
|  | 22.3 |  |  |  |  |  |
|  | 24.4 |  |  |  |  |  |
|  | 26.17 |  |  |  |  |  |
|  | 43.20 |  |  |  |  |  |
| 60. | 5.11 | sepulcrum, sepulcri/<[sepulchrum,s epulchri] $>{ }^{19}$ (3) | grāve | biriel(s | cercueil |  |
| 61. | 10.7 | spiritus, spiritus (9) | gōst | spirit | esprit | French and Latin |
| 62. | 48.11 | terra, terrae (51) ${ }^{20}$ | èrthe | lōnd | terre |  |
| 63. | 5.8 | timor, timoris (9) | dǒut(e | drēd(e | crainte |  |
|  | 18.10 |  |  |  | peur |  |
| 64. | 17.5 | torrens, torrentis (2) | wel(le | rivēr(e | foiffaiz ${ }^{21}$ / fontaine |  |
| 65. | 14.6 | usura, usurae (1) | oker | ūsūre | usure | French and Latin |
| 66. | 44.11 | varietas, varietatis (1) | selcŏuthnesse | dìversenes | diversité | French |
| 67. | 14.3 | veritas, veritatis (16) | sōthnes(se | sōthfastnes(se | verité |  |
|  | 24.11 |  |  |  |  |  |
|  | 30.6 |  |  |  |  |  |
| 68. | 37.12 | vis, vis (1) | förce | strength(e | force | French |
| 69. | 21.26 | votum, voti (2) | vŏu(e | wōn(e | voeu | French |
|  | 49.15 |  |  |  |  |  |
| 70. | 10.8 | vultus, vultus (9) | semblaunce | fäce | face | French |
|  | 20.6 |  |  | chēre |  |  |
|  | 20.12 |  |  |  | vue |  |
|  | 44.14 |  |  |  | face |  |
|  | 33.16 | vultus, vultus/[facies, faciei] ${ }^{22}$ |  | fāce | voult |  |

It is evident on inspection of the data presented above that the formal similarities between Romance lexical items used in the Latin and French texts and the nouns available for the speakers of English could undoubtedly have played a vital role in the process of vocabulary selection. Since, as reported by Black and St-Jacques (2012: liii-liv, part 1), the Dublin manuscript shows 'a preference for OE over Latin and French words', it comes as no surprise that also fewer Romance items are employed there in the cases where the two manuscript copies diverge as regards lexical choices. Table 2 presents the relevant numerical data concerning the number of lexical items employed in MEGPP L and MEGPP D which exhibit formal similarity to the nouns employed in the Latin and French texts and whose presence in the renditions might, therefore, have been motivated by this resemblance. The number given after a forward slash corresponds to the total number of Romance borrowings among the diverging items in each manuscript copy.

[^63]Table 2: Nouns exhibiting formal similarity to the items employed in the French and Latin texts

| Type of influence | MEGPP L | MEGPP D |
| :--- | :--- | :--- |
| French | 36 | 6 |
| Latin | 5 | 0 |
| French and Latin | 18 | 9 |
| sum | $59 / 84$ | $15 / 56$ |

### 5.2. Divergent cases - further analysis

As regards other factors that might have contributed to the divergent lexical choices between the different copies of MEGPP, the situation is not so straightforward. For many among the Latin lemmata showing divergent lexical items in the two manuscripts of MEGPP listed in Table 1 I cannot point to a principle governing the divergence. Let me note that only 37 items listed in Table 1 can be taken into consideration due to the low number of occurrences of the remaining 33 Latin nouns. An analysis of all the occurrences of these items does not reveal any contextual justification for the divergent choices in the case of as many as 33 (out of 37) Latin lemmata. Table 3 below lists these 33 Latin nouns presented above for whose corresponding divergent items in the relevant verses in MEGPP L and MEGPP D I cannot account.

Table 3: Divergent lexical choices which cannot be accounted for

| $\mathrm{N}^{\text {o }}$ | Latin lemma | comment |
| :---: | :---: | :---: |
| 1. | auxilium, auxili(i) (3) | no contextual motivation: auxilium, auxili(i) 'help, assistance' with the meaning of 'God's help' is also used in one of the other verses |
| 2. | bonum, boni (10) | no contextual motivation: semantic context is the same |
| 3. | causa, causae (4) | no contextual motivation: 3 out of 4 occurrences are employed with the same meaning |
| 4. | disciplina, disciplinae (4) | no certain contextual motivation for the divergence although it cannot be dismissed altogether: two occurrences (both in verse 17.39) render the explicit concept of God's teachings; in the remaining two verses, i.e. the divergent cases ( 2.12 and 49.18), this is only implied, which could suggest that the scribe of MEGPP D attempted to differentiate between the two |
| 5. | dolus, doli | the reason for the intertextual divergence cannot be given since MEGPP L and MEGPP D use different items in all the cases; the intratextual variation in MEGPP L, on the other hand, seems to be contextually motivated |
| 6. | filius, fili | no certain contextual motivation for the divergence: it is not numbersensitive, does not correspond exactly to the data from French, nor is, as far as can be glimpsed from the data, context-sensitive; however, the scarcity of the data does not allow to draw decisive conclusions |
| 7. | finis, finis | no contextual motivation |
| 8. | generatio, generationis | no contextual motivation; there is no consistency in the choices of the scribe of MEGPP D: both kin and kinde are employed in exactly the same semantic contexts in different verses |
| 9. | gloria, gloriae | no contextual motivation: both glōrīe and joi(e appear in MEGPP D to render the rex glorie 'the king of glory' phrase and in all the remaining contexts MEGPP D always chooses joi(e over glörīe; the latter noun, however, is employed consistently throughout in MEGPP L |
|  | iniquitas, iniquitatis (33) | no contextual motivation |


| 11. ira, irae | no contextual motivation |
| :--- | :--- |
| 12. judicium, judici(i) (15) | is impossible to point to a reason - apart from MEGPP L's adherence to <br> the formally similar item employed in the French Psalter - since both texts <br> employ the variant English equivalents consistently throughout |
| no contextual motivation: taking into account the fact that the meaning of |  |
| this Latin lemma is limited to 'mule; beast of burden', which prevents a |  |
| broader interpretation of any of the relevant verses, the divergences |  |
| between the manuscripts cannot be accounted for; it might be that the |  |
| scribes took into consideration slightly altering shades of meaning but in |  |
| doing so acted on different principles |  |

29. spiritus, spiritus
30. terra, terrae
31. timor, timoris
32. veritas, veritatis
33. vultus, vultus
no contextual motivation
no contextual motivation: the noun lōnd is employed twice to render terra, terrae 'earth, land, ground; country, region': once in the verse in question (48.11) and once - in both manuscripts - in verse 15.2; the semantic contexts are disparate: in the former it is God's land that is referred to and in the latter the land as a property of men; in the majority of cases in such contexts the noun $\bar{e} r t h e$ is employed invariably
no contextual motivation: in the majority of occurrences (6 out of 9, among which are the two divergent cases) timor, timoris 'fear; dread' is an expression of reverence to God, due to God; in the remaining three cases it is a dread or fear whose source is different MEGPP L and MEGPP D appear to have some motivation.

### 5.2.1. Divergences in the renderings of anima, animae

The first noun whose divergent renderings between MEGPP L and MEGPP $D$ appear to have been motivated by contextual differences among the occurrences is anima, animae 'soul, spirit, vital principle; life; breathing; wind, breeze; air'. The expected translation of this Latin noun into English is the word soul, whereas in verse 9.24 MEGPP D uses the noun heart, despite the fact that what is referred to is invariably a human soul. Having no access to the original Latin text, the verse in question being not edited in Black and St-Jacques (2012), I can posit only the following motivation behind the divergence. Among the 50 occurrences of anima, animae only one appears in a noun-noun construction, where it is a Possessor: ${ }^{23}$
(1) 9.24: Quoniam laudatur peccator in desideriis [ABL] anime /<animæ[ae]> [GEN] / sue /<suæ[ae]>/: \& iniquus benedicitur.
'Because a sinner is praised in his soul's desires, the treacherous is blessed. ${ }^{24}$
There are, however, eight such occurrences of the noun cor, cordis 'heart; mind/soul/spirit; intellect', all of which are listed in Table 4.

Interestingly, in verse 20.2, which is not given in Black and St-Jacques (2012) either, there are divergent readings in different copies of the Gallican Psalter, some of them exhibiting anima, animae rather than cor, cordis. This gives one the grounds to suspect that the structural and semantic similarities between the occurrences of cor, cordis listed above and the occurrence of anima, animae in question led the scribe of MEGPP D to connect them and as

[^64]Table 4: Noun-noun structures with cor, cordis

| $\mathrm{N}^{\mathrm{o}}$ | verse | Latin text |
| :---: | :--- | :--- |
| 1. | 18.15 | meditacio (NOM) cordis (GEN) |
| 2. | 20.2 | desiderium (NOM) cordis [animae] (GEN) |
| 3. | 24.18 | tribulaciones (NOM) cordis (GEN) |
| 4. | 32.11 | cogitaciones (NOM) cordis (GEN) |
| 5. | 36.4 | peticiones (ACC) cordis (GEN) |
| 6. | 37.8 | a gemitu (ABL) cordis (GEN) |
| 7. | 43.23 | abscondita (ACC) cordis (GEN) |
| 8. | 48.3 | meditacio (NOM) cordis (GEN) |

they were copying the text they replaced the soul with heart, unless it was already the reading present in their exemplar.

### 5.2.2. Divergences in the renderings of hono $[\mathrm{r} / \mathrm{s}]$, honoris

The case of hono $[r / s]$, honoris 'honor; esteem, regard; dignity, grace' also appears to enable one to draw some tentative conclusions as to the motivation behind the divergence between MEGPP L and MEGPP D. Verse 28.2 is the only one in which hono[ $r / s$ ], honoris appears with the meaning of the reverence due to God:
(2) 28.2: Afferte [adferte] domino gloriam \& honorem: afferte [adferte] domino gloriam nomini eius /ejus/, adorate dominum in atrio sancto eius /ejus/.
'Bring to the Lord glory and honor! Bring to the Lord His name’s glory. Adore the Lord in His holy palace's courtyard!'

The different treatment of this particular occurrence of hono $[r / s]$, honoris in MEGPP D may, therefore, indicate an effort on the part of the scribe to emphasise its distinct character.

### 5.2.3. Divergences in the renderings of miseratio, miserationis

The divergence as far as the occurrences of miseratio, miserationis 'pity, compassion' are concerned may have been caused by the influence of the French text upon the scribe of MEGPP D. In the French Psalter the word pitié is used only once, precisely in the context where both manuscripts of MEGPP employ the word pitē. In the remaining two cases merci is opted for and this is also what happens in MEGPP D - the word merci is selected. MEGPP L's choice of pitē in verse 50.2 does not seem to have been contextually motivated and may reflect scribe's or translator's independent choice.

It might also be of interest to observe that any other contextual considerations do not appear to have caused the divergence. Although it could seem that the noun pité in verse 24.6 was opted for due to the fact that merci was employed in the same verse to render misericordia, misericordiae 'pity, sympathy; compassion, mercy; pathos'(cf. 3), the two co-
occur also in verse 39.15 , where mercī is used by both manuscripts to translate the two Latin nouns (cf. 4).
(3) 24.6: Reminiscere miseracionum $/<$ [miserationum]>/ tuarum domine: \& mise|recordiarum $/<[$ misericordiarum]>/ tuarum que /<quæ>/ [quia] a seculo /<sæ[ae]culo>/sunt.
'Remember Your compassion, Lord, and Your mercy, because they are from the age!'
(4) 39.15: Tu autem domine ne longe facias miseraciones $/<$ [miserationes]>/ tuas a me: miserecordia $/<$ [misericordia]>/ tua \& veritas tua semper susceperunt me.
'But You, Lord, do not make Your compassion far from me! Your mercy and Your truth have always sustained me.'

### 5.2.4. Divergences in the renderings of sepulcrum, sepulcri

The most probable reason for the divergence between the two manuscripts of MEGPP in the case of sepulcrum, sepulcri' 'grave, tomb' is the influence of the French text. The noun cercueil 'sarcophagus, a box into which the corpse of the deceased is put to be buried' appears in the French Psalter exclusively in verse 5.11. The remaining occurrences of the Latin noun in question are rendered by sepulcre 'tomb, sepulchre'. Most probably, the scribe of MEGPP L endeavoured to reflect this shift.

As far as the contextual motivation for the divergence is concerned, there appears to be none in the case of the occurrences of sepulcrum, sepulcri. The noun appears twice in the same phrase, i.e. sepulcrum patens est guttur eorum 'their throat is an open grave', in verses 5.11 and 13.5. In the latter it is rendered by biriel(s in both manuscripts, whereas in the former, as presented in Table 1, by grāve and biriel(s in MEGPP L and MEGPP D respectively.

## 6. Conclusions

The objective of this paper was to examine lexical variance in all its complexity between two medieval manuscript copies of a single work. Among the 2877 nouns (in each text), 275, roughly $10 \%$, diverge between MEGPP L and MEGPP D, which means that every tenth noun employed in the two text versions is different from the one employed in the other manuscript. This is a surprising finding from the modern perspective but one which well illustrates Nichols' (2011) postulate to regard medieval manuscripts as exhibiting 'mutable stability'. It forces the modern reader to consider each medieval manuscript text both a reflection of a perfect text, an 'exemplar of a logocentric book-beyond-the-books' (West 2006: 246) and a separate entity at the same time.

Out of the 275 pairs of items mentioned above, 145 , representing renderings of 70 distinct Latin lemmata, have been further analysed since they were congruent with the methodology adopted in the research. The conclusions that I have arrived at appear to be consistent with the very nature of the manuscript texts. Variance is as if inherent in them and one cannot account for the majority of the divergences: variation in the renderings of 33 Latin lemmata could not be scrutinised as there were too few occurrences of these nouns. Divergences between the translations of the another 33 nouns do not appear to have been caused by any
guiding principle, although in the case of one of among those nouns, i.e. disciplina, disciplinae, it cannot be excluded. The variant lexical choices in the case of the renderings of the remaining four Latin lemmata may be tentatively postulated to have been governed by some principles but even these need to be approached with caution.

In sum, thus, the variance between the manuscript copies of MEGPP is extraordinary but there does not appear to be much logic behind their divergent lexical choices. There, after all, seems to be no method in this madness. Manuscript culture is... a world of its own.

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# A case for two voices in Old Church Slavonic reflexively marked OCS verbs* 

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#### Abstract

Old Church Slavonic data manifest significant similarities in the distribution and formal properties of anticausatives, reflexives, subject experiencer verbs, statives, and reciprocals, while their semantics may also be viewed as partly uniform. The structures representing the said classes of verbs are very frequent in the language, while passive structures, formed with analytic morpho-syntactic constructions, are relatively infrequent. Consequently, the expressions headed by anticausatives, reflexives, subject experiencer verbs, statives, and reciprocals (as well as dative impersonal structures) encroach on the area of semantics belonging in Modern Slavic to be the realm expressed in terms of passive morpho-syntax. The conclusion that can be drawn from this state of affairs is that Old Church Slavonic is characterized by the opposition of active and middle voices, while the passive voice is in its infancy.


Keywords: middle voice, passive, anticausative, subject experiencer verb, reflexive, Old Church Slavonic

## 1. From PIE medio-passives to Old Church Slavonic reflexives

The massive appearance of the reflexively marked forms in Old Church Slavonic (henceforth OCS) is tied in with the restructuring of the inflectional pattern, which underwent significant changes with respect to Proto-Indo-European (henceforth PIE). The Slavonic system is seen as developing the transitive accusative syntax, with the causative verbs being the model transitives, based on the stems most clearly marked with the vowel $-i$. On the other pole of the transitivity scale, reflexively marked monoargumental formations have appeared, with a variety of uses which can be described as middle and which may have evolved from the PIE auto-benefactives (see Gorković-Major 2009), medio-passives or are an exclusively Slavic modification. The prevailing view is that the inflectionally marked middle voice of PIE got lost and, consequently, the gap had to be replaced with an inflectional pattern which would attend

[^65]to the cases where the information of the clause pivots around a single argument undergoing some change (Savčenko 1974, Madariaga 2010). As Old Church Slavonic did not drift into the area of ergative languages, where the distinction between transitive and intransitive clauses could be case marked, it had to develop a system to perform a similar distinguishing function. The system might continue the PIE auto-benefactive marking (see Gorković-Major 2009, cf. however, Madariaga 2010), and it has adopted the form of verbs which, although endowed with the active voice inflection, yet possess a common marker of intransivity: a clitic form has developed, which reflects the PIE reflexive pronoun ${ }^{*} s(u) e$ - (see Cennamo 1993: 278), and which we will render as se. ${ }^{1}$

The use of the reflexive forms in Old Church Slavonic has been discussed in varying detail (see e.g. Brajerski 1966, Lunt 2001, Krause and Slocum 2013, Kulikov 2011, 2013, Madariaga 2010), but we feel that it still lacks an all-encompassing account linked with theoretical proposals bearing on the event structure. This paper is designed to fill this gap.

The reflexive element $s e$ appears in the monoargumental clauses, where the argument undergoes some change or directs an activity upon itself (see 1 a ), and not in the clauses with a single argument and just any intransitive (unergative) verb (see 1b).
(1) Intransitives:
a. 1061600 postite sę 'Fast!' 2.PL.IMP
b. 1052800 vǐzǐritǔ 'look' 3.SG.PRES

| 1072700 | $i \quad$ sǔnide | doždǔ | $i$ |
| :--- | :--- | :--- | :--- |
|  | and come IND.AOR.ACT.3.SG | rain NOM.SG.M | and |
|  | pridQ | rěkǔi |  |
|  | come IND.AOR.ACT.3.PL | river NOM.PL.F |  |

In other words, OCS has also intransitive verbs which are not reflexively marked.
The reflexives in Old Church Slavonic seem to have taken up the function of actor directed middle voice structures of PIE (the PIE indirect reflexive meaning, see Madariaga 2010) and have extended it to all mono-argumantal propositions directed at the argument. PIE also marked states with medio-passive voice inflection (stative verbs, which were characterized by the morpheme -ya-, see Jasanoff 1978) and OCS seems to have translated this pattern into the reflexive structure as well. ${ }^{2}$

Thus, from the viewpoint of semantics, OCS reflexively marked structures have assumed the role of the medio-passive voice in PIE. The concept of voice, as seen in the line of tradition that resulted in the development of Distributed Morphology (Alexiadou and Doron 2012, Pylkkänen 2008, Marantz 1984, Kratzer 1996,), addresses the issue of participants in a

[^66]morpho-syntactic structure. The active voice, prototypically, targets two participants, i.e. the performer of an act and the undergoer of this act, and hence in the structure-oriented descriptions of the morpho-syntax the conception of this voice is connected with the introduction of an appropriate projection, which in its specifier hosts the external argument (Marantz 1984, Kratzer 1996, Pylkkänen 2008). The passive voice concentrates on the undergoer in an event. Usually, some overt relationship with the active voice is preserved in the form of passive predication and some mention of the actant participant (Agent) is also possible. The middle voice may have no formal relationship to active or passive voices and it targets the only argument of the predication, which constitutes the sole center of an event. Most typically the argument undergoes some change of state. Actually, a lot of similarities between the passive voice and the middle voice can be noticed, both formally and semantically (the undergoer is focused in an event - see e.g. 25 below), with the difference that in the middle voice the interference of an outsider Agent into the event described is much more obscure, or indeed absent altogether, unlike in the passive voice (see Madariaga 2010). Middle voice structures make no place for the external participant: It can be present, but as a nonsubcategorized argument, and not as a logical argument of the predicate. Thus such a participant is couched in the context or introduced by a modifying phrase, and the formation of the middle voice does not depend on it in any way.

The term middle voice goes back to studies of Greek, in which the middle voice constructions strictly concerned categories where the participants in the proposition directed events upon themselves (see e.g. Madariaga 2010, Alexiadou and Doron 2012). The same function is projected onto the Old Church Slavonic reflexively marked verbs, as observed by e.g. Vaillant $(1965,2002)$ : according to him the verbs render the events described from the point of view of the subject affectedness. Lunt (2001: 158), on the other hand, states that the se structures in Old Church Slavonic express passive voice (competing with periphrastic constructions with the verb byti 'be'). Another approach depicts seq verbs as designating intransitives in general (Krause and Slocum 2013). ${ }^{3}$

In this paper we aim at finding the morpho-syntactic structures of Slavic reflexive formations, which in the construction-based approach are to directly reflect their semantic properties. We shall test and prove wrong the assumptions that they simply reflect the intransitive valency. Instead, we will claim that they constitute a morpho-syntactic middle voice category, characterized by specific semantics. In this text we will support Vaillant's (1965) intuition about the semantics and formal side of these verbs being two sides of one coin.

More recent descriptions of voice related phenomena within the Nanosyntax would not necessary imply any of the above positions, but present a strictly structural definition of the middle voice, where the active voice would differ from the middle voice in having the active voice projection introducing the external argument, while the semantics of a proposition

[^67]could be a proper parallel of the Greek middle voice. For instance anticausatives, semantically decidedly middle, can be ascribed structures characteristic of the transitive verbs, which, deprived of the internal surface argument end up as unergatives (see e.g. Medová 2011).

The situation which we come across in OCS is better reflected by the understanding of the middle voice which is proposed in Alexiadou and Doron (2012), who link the term: middle voice with the appearance of characteristic morphology and a cluster of semantic functions. These functions are the reflexive function, reciprocal function, anticausative function, dispositional middle, medio-passive and passive. However, on the top of such uses, OCS reflexively marked verbs also show the function which can be termed as auto-benefactive (for psychological experiencer verbs) (and which might continue a PIE function). All these functions correlate with the reflexive marking and as reflexive forms are strikingly frequent in OCS this may support the conception of OCS as a two voice system - with the active voice and reflexively marked middle, with largely encroaches upon the function of the passive voice. It has to be stressed that analytically formed passive structures are exceedingly rare in OCS.

In structural terms we will represent the non-active (middle) voice as a projection headed by the reflexive clitic and dominating a projection with the internal argument - which ultimately ends up realized as the surface subject.

The Gospel of St. Matthew ${ }^{4}$ from the Codex Marianus in the Corpus CyrilloMethodianum Helsingiense has been selected as the data base.

## 2. The data

The reflexive-like formations in OCS are marked by the presence of the clitic element se, which takes the form of the reflexive third person singular pronoun - identical for all the three genders in OCS (see Lunt 2001). ${ }^{5}$

As Old Church Slavonic data is not well known, we will present the relevant groups of verbs in some detail.

### 2.1. Anticausatives

The most numerous group of OCS verbs accompanied by the clitic seq are anticausative verbs. They are almost without exception prefixed, ${ }^{6}$ which will be treated as crucial in our further analysis. They appear with nominative subjects, as the example in (2) below shows:

| (2) | Vǐš̌kǔ | sadǔ | $\ldots$ | iskorenitǔ |
| :--- | :--- | :--- | :--- | :--- |

[^68]The anticausatives we have found in the text are very numerous, so it seems that this way of forming single argument predications in OCS was very productive. We find anticausatives and causatives based on the same roots, ${ }^{7}$ so probably the reflexivization technique was a productive way of bringing about the opposition in voice.
(3) The anticausative verbs:
da sǔbodetǔ sę 'in order to come about' 1081700 come about 3.SG.PRES. REFL
iskorenitǔ sę 'uproot' 1151310 uproot 3.SG.PRES
ištisti sę 'heal' 1080300 heal 2.SG. IMP REFL
iskazišę sę sami 'make' 1191220 make 3.PL.AOR
nasǔitišę sę 'fill' 1153700 fill 3.PL. AOR
naučite sę 'teach yourself 1091300,1112900 teach 2.PL.IMP
opravidi sę 'get excused, right' 1111920 excuse 3.SG.IMP
otrvěste sę 'opened' 1093000 open 3.DU. AOR
otǔimetǔ sę 'depart' 1091510 depart 3.SG.PRES
otŭpuštajqtǔ sę 'get annulled' 1090220 annul 3.PL.PRES
podobite sę 'become similar' 1060800 become similar 2.PL.IMP
pokaašę sę 'got converted' 1112010 convert 3.Dual.AOR
pokaži sę 'show yourself 1080400 show 2. SG.IMP
pokryvati sę 'cover' 1082400 cover INF.REFL
postętǔ sę 'they will fast' 1091520 fast.3.PL.PRES
prěkratili sę 'shorten' 1̌ 1242200 shorten COND.PART
prěobrazi sę 'change' 1170200 change 3.SG AOR
približi sę 'will come, become near' 1100700 come 3.SG.IMP
prosędotǔ sę 'they will break' 1091710 break 3.PL.PRES
prosvittě sę 'lighten' 1170200 lighten 3.SG.AOR
razdělǔ sę na sę 'breach' 1122500 breach PART
razidotǔ sę 'scatter' 1263200 scatter 3.PL.PRES
razoritǔ sę 'break' 1240220 break 3.SG PRES
sŭblazniše sę 'shock' 1151210 shock3.PL.AOR
sŭbljudetǔ sę 'preserve'1091720 preserve3.PL.PRES
sŭbodetǔ sę 'fulfill itself 1121700 fulfill 3.SG.PRES
sǔkrušitǔ sę 'break' 1214400 break 3.SG.PPES
sǔměritǔ sę 'lower' 1231200 lower 3.SG.PRES
sйmiri sę 'get to be on peaceful terms' 1052400 make peace 2.SG. IMP REFL
upodobi sę 'be similar' 1220200 be similar 2.SG.IMP.
$\boldsymbol{u v e ̌ s ̌ t a j e ̨ ~ s e ̨ ~ ' m a k e ~ p e a c e ' ~} 1052500$ make peace 2.PL.IMP REFL
vizznesǔii sę 'rise' 1112300 rise PART. PST. ACT. NOM. SG.
v̌̌zvěsi sę 'hang' 1270500 PART
vǐzdrěmasę sę 'nap' 1250500 nap 3.PL.AOR
vǔpadjetǔ sę 'fall' 1121110 fall 3.SG.PRES
vŭzalkahǔ [...] sę 'get hungry' 1254200 get hungry1.SG. IMP
vŭždędahǔ sę 'get thirsty' 1253500 get thirsty 1.SG. IMP
Very few anticausatives are not prefixed, like for instance the ones in (4) below:

[^69](4) Unprefixed anticausatives
avili sę 'appear' 1061620 appear CONDIT-OPTATIVE
rodišę sę 'get born' 1191200 get born 3.PL.AOR
ne pade sę 'it did not fall' 1072520 not fall 3.SG.AOR

### 2.2. Statives

The next group of reflexively marked verbs are statives. They are not very frequent in our data, still they appear, (cf, however, Madariaga 2010). Statives are rather unprefixed and they do not refer to any change of state:
(5) Statives
avlěate sę 'seem' 1232800 2.PL.PRES
črǔmǔnuetǔ sę 'look red’ 1160210 redden 3.SG PRES
ostavlěatǔ sę 'remain' 1244100 3.SG.PRES
hranite [...] se 'be protected' 1161110 protect 2.PL IMP
plakati se 'cry' 1091500 cry INF
We will claim in this paper that statives possess the structure common with a subclass of Subject Experiencer verbs, and this will make these verbs more prominent and more numerous than the sample above seems to suggest.

### 2.3. Subject Experiencer verbs

Experiencer verbs are traditionally believed to be a specific group of predicates (Belletti and Rizzi 1988, Rothmayer 2009, Landau 2010, Rozwadowska to appear), but their structure in OCS shows that they should rather be analyzed together with anticausative and stative verbs. They show the properties of both groups of verbs, and, like them, are equipped with the reflexive morpheme sę. Some of them (in 6a) resemble statives in that they do not specify a change of state and are not prefixed, some (in 6 b ) resemble anticausatives because they specify the change of state, and are prefixed in ways analogical to anticausatives (see 3 above).
(6) Subject Experiencer verbs
a. bluděte sę 'beware' 1160600 beware 2.PL.IMP
boite [...] sę 'be afraid' 1102810 be afraid 2.PL.IMP
čjudišę sę 'be surprised' 1082700 be surprised 3.PL.IMPRF
divišę sę 'be surprised' 1093300 be surprised 3.PL.IMPR
sępečete , pïčete sę 'care’ 1062800,1063100 care 2.PL.PRES
raduita sę 'be glad' 1280900 be glad 2.PL.IMP
ne protiviti sę 'not oppose' 1053900 not oppose INFT
truždajotǔ sę 'toil' 1062810 toil 3.PL.PRES
b. ne uboite sę 'do not be afraid' 1102600,1102800 be afraid 2.PL.IMP
pogněvavǔ sę 'get angry' 1183400 PART
razgněva sę ' get angry' 1220700 3.SG.PRES
sŭblaznitǔ sę ‘doubt' 1110600 doubt 3.SG.PRES

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uboěšeq sę 'get afraid' 1275410 be afraid 3.PL.AOR
usominnite sę 'be mistaken' 1212110 be mistaken 3PL.PRES
usramlějotǔ sę 'respect' }1213710\mathrm{ respect 3PL.PRES
vǔsplačqtu sę 'complain' 1243010 complain 3.PL.PRES
užasajte sę 'become scared' 1240600 scare 2.PL.IMP
otŭvrǔžetǔ sę `dissociate' 1162400 dissociate 3.PL.PRES
```

Subject Experiencer verbs are such predicates that specify emotions experienced by their subjects. Thus they fit the definition of middle voice predicates adopted in this text. They are marked in the uniform way with $s e$, just like other middle voice predicates.

### 2.4. Reflexives

Reflexive verbs in OCS do not seem to differ significantly from anticausatives, the only distinction being that they describe not the change of state, but the action directed at the argument, and the argument is animate in character. This is frequently treated as a mark of the unergative structure of verbs (see Medová 2012), but we propose that reflexives are basically like unaccusatives ${ }^{8}$, the only difference being that their roots require the animacy and agentivity of their internal arguments. In this way the reflexive reading is imposed on the predicates, otherwise anticausative in their structure.
(7) Reflexives
oblě̌̌e sę 'dress' 1062900 dress 3.SG.AOR
obratętǔ sę 'get converted' 1131530 conver 3PL.PRES
odeždemǔ sę ‘dress' 106310 dress 1.PL.PRES
prilěpitǔ sę 'join'1190510 join 3.SG.PRES
sę pomaži 'smear' 1061700 smear 2.SG.IMP
vǔzvratitǔ sę, vzrašto sę 'come back' 1101310 return 3.SG.PRES 1.SG.PRES
dvigni sę 'get up' 1212120 get up 2.SG.IMP
potręse sę 'move' 1211000 move 3.SG.AOR
prědastǔ sę 'hand in' 1262410 give 3.SG.PRES
prikosnotǔ sę 'touch' 1143600 touch PL.PRES

### 2.5. Reciprocals

Two reciprocal forms are found in our data, ${ }^{9}$ which we consider to be structurally identical with the reflexive, the difference resulting from the semantics of the stem, enforcing reciprocality on the interpretation of the obligatorily collective argument.

[^70](8) Reciprocals
sǔbǔrašę sę 'gather' 1223410 gather 3.PL.AOR
ženiti sę 'get married' 1191010 marry INF

## 3. The model

The theoretical model we have adopted for the analysis of this body of data is the root-based construction model as proposed by e.g. Pylkkänen (2008), Alexiadou and Anagnostopoulou (2004), Embick (2004, 2009), Alexiadou (2010), Alexiadou and Doron (2012), Lomashvili (2011).

In this model, morphologically complex structures result from the operation of merge, identical with the one active in the syntactic component (see Chomsky 1995). Consequently, no separation of the two spheres of language is recognized: Morphological structures are integrated with syntactic ones into a uniform system with the same principles, properties and procedures. Argumentation from the side of clause structure is admissible in building the morphologically complex verb itself.

The basic unit in a structure is the morpheme (and not a word). Roots have a specific position in this system because they are basic, indispensable elements for constructing a morpho-syntactic complex. They are category-less, which means that they acquire the category thanks to the structure they are situated in. Roots, however, are associated with some encyclopedic meaning and are marked for various kinds of idiosyncratic information, e.g. what kind of argument they co-occur with. Some roots appear obligatorily with animate arguments, e.g. play, some with more highly specified ones, e.g. grow, melt.

As all morpho-syntactic forms are made from scratch, no morphological rules are believed to turn one brand of verb into another brand. All existing similarities have to be expressed with the use of similar morpho-syntactic structures (and with morphemes introduced in them), as well as with the appearance of the same roots.

## 4. Analysis

As the formations with se are uniformely mono-argumentals, with the semantics targeting (predominately) ${ }^{10}$ the state or the change of state of the single argument present, we assume that the clitic se is a marker of the middle voice, and more precisely the middle voice head. The morpho-syntax of the verbs marked with the clitic is situated below the middle voice projection. The simplest structures are representative for statives, in which the only argument of the clause is originally the complement of the Stative Head - the root (see 9 below). The root specifies the state of the internal argument, while the V projection contributes the verbal category (see e.g. Embick 2009), whose head in the case of OCS statives may be the morphological zero or an overt suffix. Consequently, statives possess only the properties resulting from the information supplied by the root and the verbal category. The structure

[^71]illustrating a stative verb in OCS is given for: črǔmǔnиеtǔ PRES.3.SG sę REFL nbo NOM.SG 'The sky looks red'
(9) Structure for statives:


The verbalizing morphology is situated under V, which, depending on a particular verb (group of verbs) may be overt, or may be represented by the morphological zero, which is then a place-holder introducing the category marking. In the example we have chosen, it is spelled out by $-n u$-. The stative verbs in OCS are basically verbalized roots equipped with verbal inflection, the fact reflected in their maximally simple morpho-syntactic structure.

The next group of middle verbs are anticausatives, which, in contra-distinction to statives, are prefixed. We believe that the prefix constitutes the head of the process forming projection (see e.g. Ramchand 2008), as these verbs are change of state predicates, so apart from the state, the inchoative semantics must be incorporated. Consequently, the representation is richer by one projection, whose presence signals that there is a process in operation. ${ }^{12}$ Thus anticausatives and statives based on the same roots are going to be differentiated by the presence of an additional projection. The heads of this projection in OCS are prefixes. In the case illustrated in (10) the prefix takes the form of is- , while the verbalizing head is realized as the suffix -i-. The structure is given for: saď̌ [...] iskorenitǔ sę (see 2) 'The plant got uprooted': ${ }^{13}$

[^72](10) Anticausatives:


Likewise, Subject Experiencer verbs will also appear in two groups. The ones which are unprefixed and specify no processual semantics will have the structure identical to statives, see (9) above. They will differ from other statives in the specification of their roots, which require [+mental] arguments (see e.g. Everaert, Marelj and Siloni 2012), it is the arguments which are endowed with the cognitive ability of thinking. The example illustrated in the structure (11) below is: 3104100 denǐ NOM.SG [...] pečetǔ IMP.2.SG sę 'The day worries (about itself)':
(11)

Subject Experiencer verbs (stative):


On the other hand, the Subject Experiencer verbs which are prefixed normally bring about the change of state, and, consequently, they will have the processual projection in their representation: 1220700 csr NOM.SG [...] razgněva AOR.3.SG sę REFL 'The Tsar (ruler) got angry'.


In this particular form the verbalizing suffix is the vowel $-a$-, and the head introducing the processual projection is raz-.

We believe that reflexives and reciprocals are no different from anticausatives in terms of structure. The difference lies in the specification of their roots, which require animacy of their arguments, and the semantics is automatically adjusted. This representation of reflexive verbal uses is unorthodox, but the clause structure in which reflexives are inserted in OCS gives no reason to believe that reflexives are any different than other middle voice uses of verbs. This solution is a mirror image of Junghanns, Fermann and Lehnertová (2011) proposal for the derivation of anticausatives. Their anticausatives are like reflexives, but the fact that causes of the change of state have not been specified makes the anticausative reading available. We argue that reflexives are basically unaccusatives, with eventive roots taking animate arguments. We adopt this solution because of the middle semantics and regular marking of all such verbs as middles.

As the illustrations above shows, verbal derivational morphology in OCS consists predominantly in middle morphology. Another group of structures with se, which also have the middle semantics are impersonal structures with the reflexive marker. They are constructed with the $3^{\text {rd }}$ person singular verb, and the argument of the verb being realized in the Dative case. Again, these structures serve the function of creating middle voice structures, concentrated on a single argument:
(13) $S e ̨$ impersonals

| 2131120 eže | [...] dastǔ | sę vamǔ | [..] glagolete |  |
| :--- | :---: | :--- | :--- | :--- | :--- |
| what | give | refl you | say |  |
| REL.PRON.NOM.SG. | IND. PRES.ACT.3.SG. | REFL | DAT_PRON.2.PL | PRES., ACT., 2ND P., PL. |
| 'co będzie wam dane w tym czasie to mówcie' |  |  |  |  |

The impersonals have similar semantics, as they specify what happens to the internal argument. We believe that they also possess structures topped up with the middle voice
projection and an additional applicative argument, but we are not going to analyze them within the limits of this paper as they require a separate study.

This representation of the forms marked with sę in OCS reflects the uniform function of the introduction of the structures with the clitic, allowing us at the same time to depict the necessary differentiations among the forms. The uniform middle voice head defines the family of functionally identical constructions. The head prevents the external argument from being introduced on the top of the event involving the internal argument and it delimits the event's semantics as focused on the internal argument. The differences between particular word groups result from the number of projections that they encompass and properties of the roots (e.g. Experiencer verbs have roots requiring a sentient argument).

If the same root builds two different constructions, then the difference is limited to the distinction made thanks to particular projections. The case in point is e.g. the root avi, which appears in both stative and anticausative constructions, in one having the stative (14a), in the other the anticausative (14b) use. The verbs differ in their semantic content because of the processual projection contained in anticausatives:
(14) Statives/anticausatives
a. avlěate sę ‘seem' 1232800 2.PL.PRES
b. avili se 'appear' 1061620 appear CONDIT-OPTATIVE

The system of the middle voice semantics seems to be beautifully simple. Nevertheless, there are cases which do not fit this picture, albeit infrequent in the OCS system.

## 5. Exceptional forms

Apart from the forms with the middle voice semantics, OCS possesses the forms which do not fit the pattern. These are reflexiva tantum with unergative semantics.
(15) Reflexiva tantum
klaněše sę 'bow' 1080200 bow 3.SG AOR
moliši sę 'prey' 1060500 prey 2.SG. PRES INF
rotiti sę 'vow' 1267400 vow INF
As all these forms have similar meanings we assume that they may be analogical formations marking the subservient position with respect to the deity.

## 6. An alternative analysis of Subject Experiencer verbs in OCS - Madariaga (2010)

An interesting analysis of a subclass of OCS reflexive verbs has been presented by Madariaga (2010). The gist of her theory concerning a subclass of mental 'separation' verbs (bojati se be afraid') is that the clitic element $s e q$ is in fact a pronominal element in the Accusative case. Consequently, this pronoun prevents any other argument to be marked with the structural Accusative within the event projection, while the other argument lands up in the specifier of the voice phrase, as the derived subject. The verbs she writes about appear in OCS with the

Genitive complement expressing the older Ablative function. They belong to a larger group of mental activity verbs, in which they are specific in showing the Genitive complementation. ${ }^{14}$

Madariaga's analysis is at odds with the views on the structure of OCS reflexively marked predicates which we have presented here. We do not view $s e$ as a pronoun, nor as an argument, as our whole conception of the middle voice in OCS depends on the monoargumental nature of the relevant predicates.

However, we will show that Madariaga's (2010) arguments about the structure of mental 'separation' verbs may not be completely convincing.

First of all in the system of verbs that are reflexives, there are some verbs which are undoubtedly mono-argumental, i.e. statives. Madariaga (2010) gainsays their existence, however the examples in (5) show that such verbs do occur. So at least for one subclass of 'reflexive' verbs it would not make sense to assume that the element $s e q$ is a pronominal and , by extrapolation, it may not be pronominal in other contexts.

The Genitive case in Madariaga's system originates in the Ablative of PIE. However, some semantically similar predicates, resembling 'separation' verbs like bojati sę be afraid', do not show the complementation with the Genitive phrase:

## (16) Separation verbs with non-Genitive complementation <br> picěte sę dšejo vašéjo (INSTR) 1062500 'care about your soul' <br> protiviti sę zǔlu (DAT) 1053900 'object to evil' <br> divi sę emu (DAT) 1081000 'He was surprised at him'

We think that what has been disregarded is the Genitive of negation which may account for the Genitive case in Madariaga's examples (see however Madariaga 2009, where the Genitive of negation is considered in relation to Old Russian data). The Genitive case in Slavic languages realizes the arguments within the scope of negation, overt or otherwise. For instance in Polish and Slovene we have such expressions as:
(17) Genitive of negation in Polish and Slovene

Zabrakło chleba.bread.GEN (Pol) / Zmanjkalo kruha.bread.GEN (Slovene) 'There is no more bread.'
Mama nie dała chleba.bread.GEN (Pol) / Mama ni dal kruha.bread.GEN (Slovene) 'Mum did not give bread.'

Both in the overtly negatively marked clause, as well as in the clause which has not been marked in this way, the verbal complement is Genitive. The condition for the verb to appear with such a complement is its strongly negative semantics.

The reason why Madariaga's verb bojati se be afraid' is accompanied by the Genitive seems to be the very same Genitive of negation, and not the fact that the verb is situated in the morpho-syntactic structure with the assignment of the Accusative case blocked by a pronominal argument.

[^73]The mental activities that do not carry negative connotations do not show the Genitive complementation (see 9 above).

Then properties of $s e q$ itself do not seem to support its pronominal status. OCS is a highly inflectional language, in which pronouns are inflected according to case, person, number and one of the three genders. Why should a pronoun exist in this system which has lost all of these properties, possessing just one syncretic form. Such a suggestion is highly suspicious. Also a long term effect of such 'weakening ' of a pronoun could be its disappearance. If we trace the history of the reflexively marked verbs e.g. in Polish we notice that even if the reflexive element went out of use, the verbs' complementation stayed unchanged (non-Accusative). In the history of these verbs, through Old Polish to Present-day Polish, many reflexively marked forms have been ousted by synthetic anticausatives, without any reflexive marking: (OCS) prosvittěti sę 'lighten' - Polish świtać 'lighten', (OCS) vŭpadati sę 'fall' - (Polish) opadać 'fall', (OCS) postiti sę 'fast' - (Polish) pościć 'fast'. In none of these cases did the Accusative argument appear with the verb 'freed' from the pronominal argument. As Madariaga links the formal (uninflected) properties of the alleged pronoun and its poor feature content, which, taken together, influence the syntactic structure in which the 'weak' pronoun functions, then the pronoun's total disappearance should free the place in the structure so far occupied with the pronominal element. Consequently the Accusative arguments should appear. As the example in (18) below shows, it is not the case.
(18) Nadzieja (NOM) świta. ‘Hope dawns’ vs. ${ }^{*}$ Nadzieję (ACC) świta/ ${ }^{*}$ Coś świta nadzieję ${ }^{\text {* }}$ Something dawns hope'

Another problem is connected with the appearance of sebe, the alleged full ACC form of se (see Lunt 2001:103), which is supposed to be used in OCS as a form of $s e$ in the focused positions. If our predicates were complexes of a pronoun and the verb, occasionally the full form of the pronoun should appear in the structures with the reflexive verbs. It does not happen though in the case of the verbs with the middle semantics (19a). Moreover, if the verbs related in meaning and based on the same roots, but possessing no middle semantics are used, then the full pronominal form is attested (19b):

Se/sebe structures based on the same root with middle/causative semantics
a. naricatisę otǔ člvkǔu ravǐvi
call.INFIN from man GEN.PL rabbi INSTR.PL to be called from men
'be called rabbis by men' 1230700
vs.
b. otǔca ne naricaite sebě na zemi
father ACC.SG not call 2.PL.IMP yourself DAT on earth
'do not call for yourself a father on the earth' 1230900
Judging by the semantic variety of $s e f$ forms, we might reasonably expect that some case variation in their complements could be expected and then, even though our reflexive pronoun could not show number or gender marking, the case marking could be visible as the 'full' pronominal form inflects for case regularly. Given the fact that such a situation can be expected, but it does not appear, it seems that the system does not treat seq as a pronoun at all.

Another argument is connected with the appearance of a sequence of $s e$ elements. If $s e$ was a regular pronominal element, we should expect it not to appear in the form of an overt marker in the contexts where the syntactic structure complements two consecutive verbs in the same way: For instance, in Polish we form the complex structure consisting of two clauses with identical pronominal objects in two ways, i.e. both objects may be overtly realized (slightly stylistically 'heavy' variant 20 a ), or one of the pronouns ( 20 b ) can be covert:
(20) a. Szkodzę sobie $e_{\mathrm{i}}$, szczędząc sobie $e_{\mathrm{i}}$ 'I hurt myself, grudging myself (everything)'
b. Szkodzę sobie ${ }_{\mathrm{i}}^{\mathrm{i}}$, szczędząc $\mathrm{t}_{\mathrm{i}}$ 'I hurt myself, grudging (myself everything)'

On the other hand, in the cases where we are dealing with lexical items having in their buildup the reflexive element, such a deletion of a pronominal argument cannot be performed:
(21) a. Ubierajac się, nudze się 'Dressing up, I am bored'
b. ${ }^{*}$ Ubierajac $\operatorname{się,~nudzę~}{ }^{15}$

In OCS our reflexively marked verbs do not seem to allow the deletion of the clitic element, and double sę in complex sentences with two middle verbs is the norm:
(22) a. 1231200 ǐznesetǔ sę sǔměritǔ sę 'He (who) rises, will fall'
b. 1231210 i sǔměrějęi sę v ǐznesetǔ sę 'He (who) falls, will rise'
c. 1202220 az ǔkrǔštajo sę krǔstiti sę 'And, how I baptize, can you baptize?'
d. 1202300-10 krištajo sę krǔstita sę 'How I baptize, you will baptize.'

Altogether, the elements which are building parts of lexical items do not delete without consequences, while syntactic units can be eradicated, or moved around more easily. The above data shows that the reflexive verbs are rather lexical units in some significant sense, and not complexes of a verb and a pronoun.

Madariaga (2010) also claims that the psychological verbs have the reflexive passive structure, which means that the internal arguments land up as the subjects, while the Accusative case is taken up by the pronominal elements. That is why the remaining argument has to be realized as Genitive. Her arguments for the passive structure of her predicates consist in the possibility to add an agent like argument to the passive like structures.

However, the otǔ phrases, which express the causes of the change of state of the internal argument, typically do not have the agentive meaning. More often than not, do they copy the Ablative/Genitive function of PIE, which may be expressed as from. So it seems that the use of the Genitive case marked argument and the otǔ phrase (which incidentally attributes also the genitive case) are just competing ways of expressing the same function and convincing arguments to attribute the (originally) external argument (Agentive) function to this phrase are missing. Below we supply usual uses of the otǔ phrases in OCS, when they accompany reflexive verbs:

[^74](23) Non-Agentive otǔ phrases

1080310 ištisti sę otǔ prokazǔi 'Clean yourself from the pestilence'
1111920 i opravidi sę prěmodrostǐ otǔ čędǔ svoihǔ 'And wisdom justifies itself with its deeds'
1160600 bljuděte sę otǔ kvasa 'Be cautious of the acid'
1161110 hranite že sę otǔ kvasa 'Be cautious of the acid'
Occasionally, the agentive interpretation is also possible, but it is very rare: ${ }^{16}$
(24) 1230700 naricati sę otǔ člvkǔ ravǐvi 'Be called rabbis by men'

Only the last case has the agentive meaning, while its agentive character probably results from the choice of the human argument, and not from the agentivity associated with its original function as the External Argument.

Another argument by Madariaga (2010) is connected with the lack of passive participles from the relevant verbs, but if they are mono-argumental, as we claim, this would also fall out. Incidentally, the verbs can appear in impersonal structures implying the passive semantics, which is to be expected if they are mono-argumental, but not if they are already passive: constructions with the verb in the third person singular and with the complement in the Dative case (e.g. vamŭ - you. DAT below) serve as the passive voice equivalents. Psychological verbs can appear in this structure, which would be hardly viable, were they already passive.
(25) 1212800 sę mǐnitǔ vamǔ (literally: '(It) thinks to you')

Also the co-ordination of 'mental separation' verbs with non-passive structures is perfectly grammatical, as the example below shows, whereas the co-ordination of active and passive clauses in e.g. Present-day Polish sounds odd. Of OCS a similar phenomenon can be expected:
(26) 1170700 vǔstaněte i ne boite sę 'Get up and do not be afraid’

Consequently, we feel that the assumption that 'mental separation' verbs are passive structures is not well documented for OCS and we discard this solution as an option which could shed some light on the overall picture of reflexive structures in OCS. Likewise, we do not find arguments for treating se as an argument in a clause spelled out by a defective pronominal element.

## 7. Conclusion

The solution where se realizes the middle voice head in a number of verbal structures with reasonably uniform semantics and not a pronominal argument seems to us to be a superior solution, supported by morphological make-up of the relevant forms, distributional phenomena and the properties of arguments that can appear with the relevant verbs. The possibility of the existence of something like the middle voice ${ }^{17}$ in Slavic languages has been postulated by Rokoszowa (1978, 1979). She quotes a number of arguments, diachronic,

[^75]synchronic and typological, suggesting that the alleged middle voice in Slavic has been overlooked by researchers (cf. Kuryłowicz 1964). However, her conception of 'reflexive voice' differs from the one proposed here. Only the structures involving sentient participants are counted among her data, while we include here also classical anticausatives and statives, which typically do not qualify without sentient participants. Nevertheless, R Later development of the periphrastic passive voice with its characteristic marking adversely influenced the two voice system of OCS. Similarly, many reflexively marked anticausatives and statives turned into synthetic forms, as observable in e.g. nowadays Polish, so reflexive structures do not appear as frequently as they did. In contrast to so modified Modern Slavic languages, OCS shows signs of being active - middle, two voice system.

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## Corpora

Codex Marianus in the Corpus Cyrillo-Methodianum Helsingiense. http://www.helsinki.fi/slaavilaiset/ccmh/ Corpus PROIEL. http://www.tekstlab.uio.no:3000/users/sign_in

# Vocabulary research in 1983: A bibliometric analysis 

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#### Abstract

This paper belongs to a series of studies devoted to L2 vocabulary research which has been published in the last fifty years. It follows on directly from my earlier analysis of the 1982 data, and attempts to broaden the base line on which the later research developed. The paper presents a brief bibliometric analysis of L2 vocabulary research published in 1983. The analysis identifies a number of research clusters that were not present in the 1982 research but will become significant in later years, and highlights the volatility of vocabulary research at this time.


Keywords: L2 vocabulary acquisition, vocabuary research, bibliometric analysis

## 1. Introduction

This paper is the third in a series of studies which attempt to plot the way research in L2 vocabulary acquisition has progressed in the last fifty years. Earlier papers have analysed the research output for 1982 and 2006 (Meara 2012, 2014). This paper follows on directly from my earlier analysis of the 1982 data, and attempts to broaden the base line on which the later research developed. The analysis uses as raw data the pattern of co-citations among the references listed at the end of each of the papers in a small corpus of research published in 1983, and converts these patterns into maps which display how the citations cluster. This form of analysis has been extensively described in the earlier papers, but for readers who are not familiar with this approach, a short summary of the method is provided in Appendix 1.

## 2. Background

The field of L2 vocabulary research in 1983 was somewhat more active than it had been in 1982. The VARGA database (Meara n.d.) lists a total of 41 papers published in 1982; in 1983, the number of outputs had increased to 70 - an increase of just over $70 \%$. Four of these outputs were doctoral theses, masters theses or other unpublished sources and two (French Allen 1983 and Nation 1983c) were book length treatments, which are by tradition not included in bibliometric analyses of the sort used here. Galisson (1983) was also a book: it contained three
chapters, two of which had previously been published. The third chapter of this book was new material, and is included in the analysis. A small number of other papers proved to be unobtainable, and were not included in the analysis reported in this chapter. Two papers were published twice in separate locations. The remaining 60 sources are listed in Table 1.

Table 1: The 60 sources used in the analysis
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The transferability of lexical properties. In: S Gass and L Selinker (Eds.) Language Transfer in Language Learning. Rowley, Mass.: Newbury House. 1983.

## af Trampe, $P$

An experiment in foreign language vocabulary learning. Concept learning and memorization. Papers from the Institute of Linguistics, University of Stockholm 45, 1983.
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Foreign language vocabulary learning - a criterion of learning achievement. In: H Ringbom (Ed.) Psycholinguistics and Foreign Language Learning. Åbo: Åbo Akademi. 1983.

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The effects of phonotactic constraints in lexical processing in bilingual and monolinguals subjects. Journal of Verbal Learning and Verbal Behavior 22(1983), 174-188.

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Verification of Language Transfer. In: SM Gass and L Selinker (Eds). Language Transfer in Language Learning. Amsterdam: Benjamins. 1983.

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Free recall of mixed language lists: error patterns in bilingual memory. In: H Ringbom (Ed.) Psycholinguistics and Foreign Language Learning. Abo: Abo Akademi. 1983.

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As in 1982, most of this research was published by authors who contributed only a single source. Nation, the most prolific author in this year, contributed three items, three other authors (Carter, Meara and Ringbom) contributed two papers each. Binon and Cornu published the same paper twice, as did Rapport, Tan and Whitaker. The remaining authors each contributed to just a single paper.

## 3. Analysis

A total of 992 unique authors were cited in the 1983 literature, and the distribution of these citations is shown in Table 2. Table 2 shows that one source was cited in nine of the papers in the 1983 corpus, one author was cited eight times, three authors were cited seven times, and so on down to the 644 authors who were cited only once in the 1983 corpus. The most heavily cited authors in 1983 were Lambert (9), Michael West (8) and Albert, Obler and Pit Corder

Table 2: The distribution of citations in the 1983 corpus.

| frequency | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| cases |  | 1 | 1 | 3 | 4 | 10 | 18 | 55 | 156 | 644 |

(7). Of these, only Lambert and West were also highly cited in the 1982 data, and this suggests that the significant influences in research are still relatively fluid at this time.

The figures in Table 2 tell us that a total of 92 authors are cited at least three times in this data. This figure is close to the standard figure of 100 authors which is commonly used in cocitation analyses, and the data that is reported in the following paragraphs is based on the cocitation links between these 92 authors. The data was analysed using the method summarised in Appendix 1, and mapped using the Gephi software (Bastian, Heymann and Jacomy, 2009). Gephi's output for the 1983 data is shown in Figure 1. Gephi identifies eight research clusters in the data, but really the data falls into two halves - the very large, densely connected cluster in the northeast corner of the map, and the several small clusters in the southwestern quadrant. These two halves are almost detached from each other, but a small number of nodes - notably Kucera and Francis - serve to keep the map as a connected whole.

Gephi's eight clusters can be characterised as follows:
Cluster I, the large cluster in the northeast sector of the map consists largely of researchers who are interested in neurolinguistics. Most of these co-citations come from a set of four papers that were published in a special issue of Langages, and the very dense pattern of citations in this cluster arises because almost all the papers refer to a small set of shared references in clinical linguistics: Albert and Obler's seminal book The Bilingual Brain (Albert and Obler 1979), some classical work by Pitres and Luria, and some more recent experimental studies by Lambert and his colleagues. None of this work is concerned with vocabulary learning and teaching, though it is interested in how bilingual speakers identify and process


Figure 1. Co-citation analysis of 92 authors who are cited at least 3 times in the 1983 corpus. Links weaker than 2 are eliminated. Nodes are sized according to their betweenness centrality.
stimuli in their two languages, how they keep them apart, and how these processes break down in bilingual aphasics. The small subcluster that projects from Lambert - Kolers, Macnamara, McLaughlin, Ehri and Preston - is a group of psychologists who are interested in the behaviour of bilingual subjects in experimental studies of language. Typically this subgroup does not use the clinical methods that are common to the rest of this cluster, relying instead on behavioural methods of enquiry.

Cluster II, the small cluster in the centre of the map consisting of Eve and Herbert Clark, is a Child Language Development cluster.

Cluster III, at the centre of the map - Kucera and Francis, Thorndike and Lorge, West, Davies and Nation - includes of a number of word frequency counts and word lists. The appearance of Paul Nation in this cluster is notable.

Cluster IV - R West, Hatch, Oller, Goodman, Smith, Pearson and Twaddell - is basically a reading cluster.

Cluster V, immediately to the West of cluster IV consists of Lehrer, Labov, Miller and Halliday. I think this is a cluster of people concerned with meaning and semantics.

Cluster VI, immediately North of Cluster V, consists of people who are working on corpora and dictionaries.

Cluster VII, Johansson, Palmberg, Kruse and Levenston, is the nearest thing in this map to a cluster which is primarily concerned with L2 vocabulary acquisition.

Cluster VIII at the Western edge of the map is the largest of the smaller groups. Its principal nodes are people who were associated with the Edinburgh approach to Applied Linguistics, together with other European scholars, notably Galisson, Cornu and Ostyn, who were working on pedagogical aspects of $L 2$ vocabulary acquisition.

To make it easier to examine the dynamic features of the 1983 map, I have reproduced an analysis of the 1982 data in Figure 2. This analysis is slightly different from the data presented in my 2014 paper - the earlier paper used a threshold for inclusion which was lower than the threshold I have used for the 1983 data, and this makes it more difficult to make direct comparisons from one map to another. The map shown in Figure 2 uses the same data parameters as Figure 1, i.e. an inclusion threshold of at least three citations, and co-citation links which occur only once in the data set are deleted.

The fundamental structure of the 1982 map can still be seen in the 1983 map. Both maps consist of two halves which are relatively independent. In both maps, one of these halves is focused around the work of Lambert. However, the 1982 map contains a strongly connected cluster focused on Richards and Carroll, which is principally concerned with imagery and mnemonics in L2 vocabulary acquisition. This theme seems to have disappeared in the 1983 map. Instead, 1983 shows some restructuring of the word-list and frequency count cluster, and the appearance of a cluster of European vocabulary researchers. We also find formal


Figure 2: Co-citation analysis of 47 authors who are cited at least 3 times in the 1982 corpus. Links weaker than 2 are eliminated. Nodes are sized according to their betweenness centrality.
semantics and corpus research alongside L2 vocabulary research. Cluster IV, the reading cluster, represents a new strand in L2 vocabulary research.

The one outstanding difference between the two maps is the massive growth found in cluster I in 1983. Some work in neurolinguistics does appear in the 1982 map, but it was mainly concerned with experimental studies of word recognition, with a particular interest in non-roman scripts. The new cluster I is much more wide-ranging than this, and there has been a significant shift towards language pathology and neurolinguistics. It is notable that most of the names that were co-cited with Lambert in the 1982 map are not fully integrated into this new cluster. However, what is also very striking about this new cluster is that it has no links to other clusters in the map: none of the new sources in this cluster are co-cited alongside people located in the western end of the 1983 map. The most obvious interpretation of this patterning is that the few linguists working on L2 vocabulary acquisition do not seem to be aware of the sources that influence neurolinguistic research, or at least do not see its relevance for their own work. Similarly, the neurolinguists seem to be working in a bubble which does not make use of much linguistic research. Few of the names in Cluster I will be recognisable to linguists, and those that might be are mainly cited in the context of first language acquisition research. Obviously, there was an opportunity here for some cross disciplinary interaction, but we cannot tell from these maps whether interactions of that sort will indeed be a feature that we find in future maps. Intuitively, it seems that this window of opportunity was one whose significance was not realised at the time.

Figure 3 shows a simplification of Figure 1. This figure is based on the 1983 map, but includes only people who were significant both in 1982 and 1983 - the „survivors". Half of the 47 people who appear in the 1982 map do not appear in the 1983 map - a figure which suggests that there is a great deal of churn in the work of the time. The co-citation patterns between the remaining 23 people who appear in both maps still give us a good idea of what the main strands of research are in 1983.

The broad outline of the 1982 map is also easily recognisable in this map: the coherent group of researchers surrounding Lambert, who work on the psycholinguistic behaviour of


Figure 3: The Survivors: co-citation analysis of sources that appear in both the 1982 and the 1983 maps.
bilinguals, a set of word lists, and a ragbag of disconnected clusters that represent work on semantics and corpora. Tulving (in the centre of the map) represents work on the psychology of memory. Meara - the only name that is recognisably an L2 vocabulary acquisition researcher in this map - appears as an isolated outpost at the western edge of the graph, with no remaining connections to any of the other clusters.

We can also map out the co-citation relationships between the new sources who only appear in the 1983 graph, and this analysis is shown in Figure 4. Here, the 23 sources who appear in both the 1982 and the 1983 graph have been removed, and so that we are left with the co-citation relationships between the 69 new sources which appear only in the 1983 map. Figure 4 clearly highlights the growth points in research at this time. This growth is evenly divided between the neurolinguists and what we might broadly call sources in applied linguistics. However, the neurolinguists are clearly an organised research group with a common agenda, while the non-clinical sources are more disparate and less structured, and do not share a set of common reference points at this time. Only the new reading cluster shows any real signs of developing into a research front.

## 4. Discussion

In summary, then, 1983 is still very much part of the early formative period of modern L2 vocabulary research. The research being published is quite limited in scope, and there is no clear overarching research agenda in place. There has been some growth in research in this area - far more publications, and a richer set of co-citations, but most of this development


Figure 4: Co-citation analysis of the 69 new sources appearing in the 1983 map .
seems to have taken place in a way which has had little impact on the kind of research that was being carried out in 1982. Some work that was prominent in the 1982 data - notably the research on imagery and mnemonics - no longer figures as an active research feature.

One tantalising feature of this analysis is the appearance of Paul Nation as a new source in the 1983 data. Nation was the most prolific vocabulary researcher in this year, with three publications, including one book. He had also published extensively in earlier years, but his work at this stage is not influential enough for him to appear as a Highly Significant Influence in the co-citation maps. In later years, of course, Nation is a massive figure in vocabulary research, but in 1983 his influence remains quite limited. Significantly, 1983 saw the publication of Nation's book length treatment of issues in vocabulary learning and teaching (Nation 1983). This text was an early precursor of Nation's 1990 book, a text which set the agenda for vocabulary research in the 1990s and beyond. The 1983 text, however, was published by the English Language Institute at the Victoria University of Wellington, and remained difficult to get hold of. It had only a limited circulation, and for obvious reasons, it is not widely cited in the 1983 research literature. Nevertheless, Nation's 1983 book is really the first sign of a systematic account of modern vocabulary research. It marks the beginning of the end of this early piecemeal phase in vocabulary research, setting out a proper research agenda that eventually comes to dominate the field.

In the meantime, the strongest feature of the L2 vocabulary research scene is the vocabulary and reading cluster which is just beginning to emerge around this time. The new cluster seems to be well-grounded in L1 reading research (Smith, Goodman) and we can expect to see more work in this area in subsequent years.

A feature which is less obvious at first sight is the presence of a significant number of researchers from continental Europe in Figure 4. The small cluster consisting of Johansson, Palmberg, Kruse and Levenston represents the beginning of a distinctively European approach to lexical errors and the analysis of learner output data. The small sub-cluster consisting of Galisson, Descamps, Cornu, and Ostyn represent a long-standing interest in vocabulary by French speaking researchers. Galisson's work is partly a reaction against some very influential research on „available vocabulary" carried out by Gougenheim and his colleagues in the 1970s (Gougenheim et al. 1964). This work is no longer apparent in the 1983 map - though it continued to be influential in other areas, notably Spain (Jimenez Catalan 2014). Ostyn's work develops a distinctive semantic approach to vocabulary teaching. (Rudzka, B, J Channell, Y Putseys and P Ostyn 1981, 1985).

Finally, it is worth noting the emergence of a small corpus linguistics and dictionaries cluster focused on Carter and Quirk. This type of research would become the defining characteristic of vocabulary research in the UK in the years to come.

## 5. Conclusion

This paper has presented a brief bibliometric analysis of L2 vocabulary research published in 1983. The analysis has identified a number of research clusters that were not present in the 1982 research but will become significant in later years, and highlights the volatility of vocabulary research at this time. The main contrast in the 1983 map is between the tightly organised research on neurolinguistics, which shares many common points of reference, and the much less organised, more heterodox research which researchers in L2 vocabulary acquisition cite. There is no evidence at this stage that a coherent approach to L2 vocabulary acquisition in emerging.

It is important to bear in mind that the analysis in Figure 1 is not a complete map of the research being carried out in 1983. The analysis is focused on 92 highly cited authors - people who are cited in at least three of the papers published in 1983. This criterion is quite loose: it means that the people appearing in the 1983 map were all cited in about $5 \%$ of the research papers published in that year. There were, however, a large number of people who failed to meet this criterion, and their work does not appear in the map. Some of this work will turn out to be important in later maps.

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## Appendix 1. Co-citation analysis

The co-citation method was developed by Small in a number of papers published in the 1970s (e.g. Small 1973). This approach, which was actually built on earlier bibliometric work by Price (1965), has been extensively used to analyse research in the natural sciences (e.g., White and Griffith, 1981) but does not seem to have been adopted as a standard tool by researchers in the Humanities (Hellqvist, 2010).

The raw data for a co-citation analysis consists of a list of all the authors cited in the set of papers to be analysed. First we identify the literature that we want to analyse. Normal practice is to eliminate from this list bibliographies, monographs and theses, which tend to contain unusual citation patterns. This elimination leaves us with a set of research papers that cover the relevant topic or time span. Next we make a list of all the authors cited in each paper. Each author is listed separately, and co-authors all receive the same weight. Authors citing themselves are not penalised. From this author list, we can construct a list of co-citations - i.e. a list which identifies pairs of authors who are cited in the same work.

After this, we count the number of times a co-citation appears in this list, and eliminate the co-citations which appear only rarely. This simplifies the displays generated by the next procedure. The best results seem to emerge when the maps are not too dense. We therefore normally set the threshold for inclusion so that about 100 authors appear as nodes in the maps. We also eliminate the weaker co-citiation links so that the resulting map contains about 1000 edges.

Following this preparatory work, the list of eligible co-citations is submitted to GEPHI (http://gephi.org). GEPHI performs a cluster analysis on the co-citation data and generates a map which shows the relationships between the clusters. Each cluster consists of a number of authors who are frequently cited alongside each other. The clusters represent „invisible colleges" in the research community - a group of people who share common research interests. The specific focus of each cluster can usually be established by identifying the cluster members who figure in the largest number of co-citations for that cluster.

Some computer programs which facilitate the collection and analysis of co-citation data can be found on the Lognostics Tool Box web site: http://www.lognostics.co.uk/tools/

# The Information Status of Old English Constructions with Titles and Proper Names* 

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#### Abstract

The paper examines the information status of Old English structures consisting of proper names and titles. The nominal constructions under discussion fall into three categories: the Ælfred cyning type of structure, where the title appears without any determiner and follows the proper name, the Ælfred se cyning type, where the title appears with a determiner and follows the proper name, and the se cyning Ælfred type, where the title with a determiner precedes the proper name. It is demonstrated that the se cyning Elfred construction is mainly used anaphorically: an overwhelming majority of the examples of the structure in the Old English texts examined here refer back to an entity mentioned in the preceding discourse. Moreover, most of the antecedents of the se cyning Ælfred structures appear to be local, that is they occur in the same or in the immediately preceding structural unit. It is argued that the anaphoric nature of the se cyning Alfred constructions may be responsible for their distribution in Old English texts.


Keywords: information status, discourse, Discourse-old, Discourse-new, anaphors, Inferrables, antecedent

## 1. Introduction

The aim of this paper is to investigate the information status of Old English structures consisting of proper names and titles.

Old English texts such as the Anglo-Saxon Chronicle and Bede's Ecclesiastical History of the English People abound in constructions in which one element is a proper name and the other one a common noun which, as a rule, denotes rank or title. In such structures the name either precedes or follows the common noun. When the name precedes the common noun, the noun

[^76]can appear with or without a determiner (cf. Carlton 1970: 50 and Mitchell 1985: § 1461). When the name follows the common noun, the noun is always accompanied by a determiner. ${ }^{1}$ We thus have three kinds of structure with proper names, which we can call respectively the Alfred cyning, Ælfred se cyning and se cyning Ælfred types. All three types are usually regarded as appositions (see, for instance, Mitchell 1985, Peltola 1960, Shannon 1964, Shores 1971, or Sprockel 1973). However, the first of the three structure types is argued not to be appositional in Sielanko-Byford (2013).

Scholars doubt whether we will ever be able to discover the difference in meaning and function between the three construction types, since this is impossible without native speaker informants (see Mitchell 1985: $\S \$ 1462$ and 1463). Our insufficient knowledge of the addressee of Old English texts as well as the lack of native speaker informants may well prevent us from ever discovering any differences in meaning between the constructions. The texts themselves, however, should provide enough clues as to some possible differences in the use of the structures in discourse. For instance, there might have been a preference for using one construction to introduce a new referent into the discourse. Another construction might have been preferred when the referent had been mentioned or implied before. In other words, there may have been some - potentially important - differences between the information status of the three construction types. And the question of whether such differences existed and, if so, what they were, is precisely what this paper aims to find out.

The organization of the paper is as follows. In Section 2 we examine the information status of the three construction types, in Section 3 structures which have an antecedent earlier in the discourse are considered more closely, Section 4 is devoted to constructions without an antecedent which are, however, linked to a 'trigger' entity that appears earlier in the discourse. In Section 5 conclusions and implications for further research are presented.

### 1.1. The data

The Old English data used in this article were drawn from the following texts in the Dictionary of Old English Corpus: Manuscripts A and E of the Anglo-Saxon Chronicle, the Old English Orosius and Bede's Ecclesiastical History of the English People.

All our data come from the texts in the 2000 Release of the Dictionary of Old English (=DOE). The texts of Chronicle A and Chronicle E used in the 2000 Release of the DOE are from the edition by Earle and Plummer. In the online version of the DOE they were later replaced by Bately's (1986) edition of Manuscript A and Irvine's (2004) edition of Manuscript E.

[^77]
## 2. Information status of Old English constructions with titles and proper names

### 2.1. Different types of information status

Prince (1992) distinguishes between different kinds of 'old/new' information:
> discourse entities may be considered old or new with respect to the hearer, or Hearer-old/Hearer-new. Second, they may be considered old or new with respect to the discourse, or Discourse-old/Discourse-new. [...] Third, discourse entities may be of a third category, Inferrable, where they are technically Hearer-new and Discourse-new, but depend upon beliefs assumed to be Hearer-old, and where these beliefs crucially involve some trigger entity [...].

(Prince 1992: 309)
In the case of Old English texts, it might not be easy to decide which entities should be regarded as Hearer-old and which as Hearer-new. As Traugott and Pintzuk (2008: 75) state, 'it must always be recalled that our access to the information status of ancient texts will be limited [among others] by the impossibility of fully understanding the encyclopedic knowledge of authors and audiences in the past.' They also point out that


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work on information status relies on inferences about what addressees may be expected to treat as 'shared' information [...], and these inferences are less robustly recovered for a society that flourished over a millennium ago. [...]. [Therefore,] we must pay close attention to the discourse context in order to make reasonable interpretations. In other words, we are more reliant on textual evidence than may be customary for analyzing information structure in contemporary languages [...].


(Traugott and Pintzuk 2008: 63)
Our inability to predict with a reasonable degree of accuracy what constituted the 'encyclopedic' knowledge or 'shared' information for writers and (intended) readers of Old English texts will make identifying an entity as Hearer-old or Hearer-new a difficult task. For the same reason, it will not always be easy, either, to identify a discourse entity as an Inferrable. However, we should be able to decide quite easily which entities in an Old English text are Discourse-old and which are Discourse-new.

What Prince (1992) calls Discourse-old entities, that is entities for which an antecedent can be found in prior text, are usually called anaphora in other sources (e.g. Huang 2006, SchwarzFriesel 2007, Strube 2007, see also Traugott and Pintzuk 2008). They are, more precisely, 'direct' anaphora and can be distinguished from 'indirect' anaphora. Indirect anaphors have no explicit antecedent in the preceding text but are linked to a 'trigger' entity, or anchor, which has already been evoked in the discourse (see Schwarz-Friesel 2007: 7-8). Schwarz-Friesel (2007: 7) argues that the term 'indirect anaphora' is more general than terms such as 'inferrables' or 'associative anaphors', because not all indirect anaphors are based on inferences and not many are the result of an activation of associations. However, the type of relationship between the trigger entity and the anaphor is not relevant to our study. Therefore, the term indirect anaphora will be used as an alternative to Prince's (1992) term 'Inferrables' in this paper.

### 2.2. Information status of the se cyning Alfred costructions

Let us now examine the constructions in which the proper name follows the title in respect of their information status. For reasons outlined in Section 2.1 above, we have concentrated on their discourse status and identified them as either Discourse-old or Discourse-new. We have also attempted to identify Inferrables.

The data for the se cyning Ælfred constructions are presented in the four tables below. The first three tables show data for each of the three texts which are the sources of our Old English data, namely Orosius, Bede and the Chronicle. The fourth table shows the figures for all three texts. Table 1 and the following tables include data for the structures in which the common noun was preceded either by the determiner se alone or by se and a pre-modifying adjective.

Table 4 shows that only about 6 percent of the se cyning Ælfred constructions are Discourse-new. The remaining 94 percent are either Discourse-old or Inferrable, in other words, they are - respectively - direct and indirect anaphors. This suggests that se cyning Elfred constructions are anaphoric in nature.

As for the Discourse-new constructions, 4 out of the 10.5 such structures which occur in Bede's History, are in the Preface. The first one of those, $2 / 1$ ðone leofastan cyning Ceolwulf'theacc.masc.sg. dearest king Ceolwuld', appears in the greeting at the very beginning of the Preface

Table 1: Se cyning Ælfred constructions in Orosius

|  | Discourse-Old | Inferrable | Discourse-New |
| :--- | :---: | :---: | :---: |
| cyning | 6 | 2 | 0 |
| consul | $2.5^{*}$ | 0 | 1.5 |
| cwen | 3 | 0 | 0 |
| casere | 1 | 0 | 0 |
| latteow | 1 | 0 | 0 |
| Total | 13.5 | 2 | 1.5 |
|  | (including 5.5 constructions |  |  |
| with adjectives) |  | (including 0.5 constructions <br> with adjectives) |  |

* Halves appear whenever a plural construction contains two proper names, one of which is Discourse-old and the other Discourse-new or Inferrable.

Table 2: Se cyning Ælfred constructions in Bede

|  | Discourse-Old | Discourse-New |
| :--- | :---: | :---: |
| cyning | 9.5 | 2.5 |
| biscop | 26 | 2 |
| papa | 12 | 2 |
| abbud | 5 | 2 |
| arcebiscop | 6 | 0 |
| casere | 2 | 0 |
| cwen | 0 | 1 |
| (mæesse)preost | 0 | 1 |
| ealdormon | 1 | 0 |
| Total | 61.5 | 10.5 |
|  | (includes 43 constructions | (includes 4 constructions |
|  | with adjectives) | with adjectives) |

Table 3: Se cyning Alfred constructions in the Chronicle

|  | Discourse-Old | Inferrable | Discourse-New |
| :---: | :---: | :---: | :---: |
| cyning | E: 122 | E: 1 | E: 0 |
|  | A: 6 | A: 0 | A: 0 |
| eorl | E: 24 | E: 0 | E: 3 |
|  | A: 2 | A: 0 | A: 0 |
| biscop | E: 16 | E: 0 | E: 2 |
|  | A: 1 | A: 1 | A:0 |
| sercebiscop | E: 15 | E: 0 | E: 1 |
|  | A: 0 | A: 0 | A: 0 |
| ealdorman | E: 3 | E: 0 | E: 0 |
|  | A: 1 | A: 0 | A: 0 |
| abbod | E: 13 | E: 1 | E: 0 |
|  | A: 0 | A: 0 | A: 0 |
| čðeling | E: 4 | E: 2 | E: 0 |
|  | A: 0 | A: 0 | A: 0 |
| papa | E: 8 | E: 2 | E: 1 |
|  | A: 1 | A: 0 | A: 1 |
| cwen | E: 3 | E: 0 | E: 0 |
|  | A: 0 | A: 0 | A: 0 |
| casere | E: 1 | E: 0 | E: 0 |
|  | A: 1 | A: 0 | A: 0 |
| Total | E: 209 | E: 6 | E: 7 |
|  | (includes 12 constructions with adjectives) | A: 1 <br> (includes 1 construction | (includes 1 construction with an adjective) |
|  | A:12 <br> (includes 2 constructions with adjectives) | with an adjective) | A: 1 <br> (includes 1 construction with an adjective) |

Table 4: Se cyning Ælfred constructions in Orosius, Bede and the Chronicle

| Discourse-Old | Inferrable | Discourse-New | Total |
| :---: | :---: | :---: | :---: |
| 296 | 9 | 20 | 325 |
| $($ c. $91 \%)$ | $($ c. $3 \%)$ | (c. $6 \%)$ |  |

and refers to king Ceolwuld, who is the addressee of the letter. It can thus be regarded as a deictic expression in the same way that the phrase which opens the Preface is, namely $2 / 1$ Ic Beda Cristes peow and meessepreost 'I, Bede, Christ's servant and priest'. The structure $2 / 1$ ðone leofastan cyning Ceolwulf 'the-acc.masc.sg. dearest king Ceolwuld', then, is an exophor, 'the 'antecedent' of [which] [...] lies outside what is said or written' (Huang 2006: 231). The other three Discourse-new constructions which appear in the Preface, that is $2 / 16$ se arwurða abbad Albinus 'the-nom.masc.sg. venerable abbot Albinus', $2 / 22$ pers eadigan papan Sancte Gregories 'the-gen.masc.sg. blessed-gen.masc.sg. pope-gen.masc.sg. Saint-gen.masc.sg. Gregorygen.masc.sg.', and 4/22 ðæes arwurðan biscopes Cynebyrhtes 'the-gen.masc.sg. venerablegen.masc.sg. bishop-gen.masc.sg. Cynebyrht-gen.masc.sg.', all refer to well-known figures of the day and as such can most probably be assumed to be known to the addressee, in other words Hearer-old. Pope Gregory the Great is without a doubt the most important and well-known pope of the Middle Ages. Moreover, he is also the pope who sent St Augustine and his monks to the kingdom of Kent with the mission of bringing Christianity to the Anglo-Saxons. We can be
certain, therefore, that although it was Discourse-new, the translator of the Latin text of Historia Ecclesiastica must have assumed the structure paes eadigan papan Sancte Gregories to constitute old information, as it was Hearer-old. Abbot Albinus of Canterbury, who encouraged Bede to write the History, is called betst geloered on Angelcynne 'the best scholar in England' in the Old English version of the text. Moreover, a letter to the same abbot Albinus accompanied the original version of Historia Ecclesiastica. Bishop Cynebyrht was Bishop of Lindsey at the time when Bede was writing his History. He was also one of Bede's sources of information for Historia Ecclesiastica. We can thus assume that the translator would have presented both se arwurða abbad Albinus and ðæes arwurðan biscopes Cynebyrhte as Hearer-old.

Most of the referents of the remaining 6.5 Discourse-new structures in Bede, all of which occur in Chapter Headings, are kings, popes, abbots or bishops with whom the addressee was probably familiar. Nevertheless, as has been mentioned, we cannot be completely sure about what constituted either the encyclopedic or 'shared' knowledge of 'authors and audiences from the past' and thus we cannot say with absolute certainty that the structures in question are Hearer-old. On the other hand, since they are all used in Chapter Headings, which precede, but at the same time, sum up a given chapter, the constructions can be regarded as cataphoric, similarly to definite noun phrases used in the titles of novels, plays, films, etc. in Modern English (e.g. The Secret Agent, The Crucible, The Pianist and so on). Cataphora, together with anaphora, 'can be subsumed under the term 'endophora' [...], referring to the relation in which the anaphor/cataphor and its antecedent are within what is said or written' (Huang 2006: 231).

One of the 1.5 Discourse-new structures in Orosius also appears in Chapter Headings and can therefore be regarded as cataphoric. However, none of the 8 examples of the Discoursenew se cyning Ælfred structures in Manuscripts A and E of the Chronicle can be interpreted as either cataphoric or deictic. With the possible exception of one example (see below), there is no reason to believe, either, that they constituted 'old' information in the sense that they can be assumed to be old with respect to the hearer's beliefs. Does this mean, then, that unlike the overwhelming majority the se cyning Ælfred constructions they should be regarded as constituting 'new' information?

There is some evidence to suggest that at least some of the examples may not have been intended to represent new information. For example, where Chronicle $A$ in the entry for the year 885 has an antecedentless structure, se goda papa Marinus, Chronicles E, C and D all have an anaphoric construction whose antecedent appears in the entry for 883 (884 in Chronicles C and D):
(1) a. ChronA $885.28^{2}$ by ilcan geare forbferde se goda papa Marinus
the same year died the good pope Martin
'The same year the good pope, Martin, died,'3
where the structure se goda papa Marinus evokes an entity which has not been mentioned in the prior discourse,

[^78]b. ChronE 885.17 (=D, C 886) Đy ilcan geare forðferde se goda papa Marinus
the same year died the good pope Martin 'The same year the good pope, Martin, died,'
where the structure se goda papa Marinus refers back to an entity that has been evoked by Marinus papa in a previous entry:

c. ChronE 883.1 (=D, C884) $\begin{array}{ll}\text { Marinus papa sende pa lignum domini Alfrede cynge } \\ & \text { Martin pope sent then lignum domini Alfred king } \\ & \text { 'Pope Martin sent King Alfred the "lignum domini"' }\end{array}$

As we can see, A is the only manuscript which omits the information about Pope Marinus in the entry for 883 , thus leaving the construction se goda papa Marinus in the 885 entry without an antecedent. It seems reasonable to assume that the author(s) of the original text had intended the phrase se goda papa Marinus in 885 to be anaphoric and to refer back to Marinus papa in 883 . However, through the omission of the relevant material in 883, the scribe responsible for the entries in question in Manuscript A may have accidentally left the structure without an antecedent. The structure se goda papa Marinus in ChronA 79(855) could also be interpreted as Hearer-old, since Marinus would have been pope during the lifetime of the compiler(s) of the 'first chronicle'. ${ }^{4}$

Two of the 'antecedentless' se cyning Elfred structures in Chronicle E appear in the Peterborough Interpolations, which are post-1121 additions to Chronicle E. The first one of these is in the entry for the year 777:
(2) ChronE 777.11 At pis gewitnesse was seo kining Offa. \& seo kining Egferð. at this testimony was the king Offa and the king Everth
\& seo cercebiscop Hygeberht. \& Ceolwulf biscop. [...]
and the archbishop Hibbert and Ceolwulf bishop
\& feola opre biscopes \& abbots
and many other bishops and abbots
'King Offa, King Everth, Archbishop Hibbert, Bishop Ceolwulf, and many other bishops and abbots were witnesses to this'

Archbishop Hibbert appears again in Chronicle E (also in Chronicles D and C) in the annal for 785:
(3) ChronE(=C, D) 785.1 Ianberht ercebiscop forlet sumne doel his biscopdomes. Eanbert archbishop forsook some part his bishopric \& fram Offan cininge Hygebriht wes gecoren and from Offa king Hibbert was chosen
'Archbishop Eanbert resigned from some part of his bishopric and King Offa appointed Hibbert'

[^79]A possible explanation for the antecedentless structure seo cercebiscop Hygeberht is the following: the 'archbishop', like the two kings mentioned before him (King Offa and King Everth), is presented as an important figure, one of the key witnesses to the granting of land to a nobleman by Beonna, abbot of Medeshamstede (that is Peterborough). Being an important figure, the archbishop is obviously assumed to be well-known to the reader. It follows that the discourse entity that represents him can be assumed to constitute Hearer-old information. Hence the use of a se cyning Ælfred construction. By contrast, in the same entry constructions of the type Ælfred cyning are employed to refer to the less well-known men of the church who were also witnesses at the same event: Ceolwulf biscop. \& Inwona biscop. \& Beonna abbot.

The other Discourse-new structure which appears in an Interpolation, namely se cining Burhred, seems to have been used in the same way. The Mercian king is presented as the most important witness to the signing of an agreement between Abbot Ceolred and the monks of Medeshamstede and a person called Wulfred:
(4) ChronE 852.9 Her woes wið se cining Burhred. \& Ceolred cercebiscop [...] here was with the king Burhred and Ceolred archbishop \& Berhtred biscop. [...] \& feola oðre.
and Berhtre bishop and many others
'King Burhred, Archbishop Ceolred, Bishop Berhtre and many others were present'
Another Discourse-new entity in Chronicle E, namely se eorl Walðeaf, appears in the annal for 1069:
(5) ChronE 1069.5 pa ferde se eorl Walðeaf ut. \& com he \& Eadgar aððeling then went the earl Waltheof out and came he and Edgar prince 'Then Earl Waltheof rode out and he and Prince Edgar arrived'

Chronicle D gives the same information about the earl in the annal for 1068. However, an Ælfred cyning structure, namely Waldpeof eorl, is used to represent the Discourse-new entity:
(6) ChronD 1068.29 heom com parr togenes Eadgar cild \& Waldpeof eorl them came there against Edgar child and Waltheof earl 'Prince Edgar and Earl Waltheof came [with an army] and faced them'

The next time the eorl is mentioned, in both Chronicle E and Chronicle D a se cyning Ælfred construction is used:
(7) ChronE 1070.1 (=D 1071) Her se eorl Walpeof griðede wið pone cyng. here the earl Waltheof made peace with the king 'In this year Earl Waltheof made peace with the king'

The contrast between the two chronicles in the use of structures representing a Discourse-new entity in (5) and (6) above suggests that the se cyning Ælfred construction in Chronicle E might have been a mistake: the scribe may have overlooked the fact that the structure se eorl Waldeaf referred to an entity that had not been evoked before.

There seems to be no readily available explanation for the remaining 4 Discourse-new structures in Chronicle E.

Summing up, the vast majority of the se cyning Ælfred constructions in all the texts that have been examined are used anaphorically, 91 percent are direct and 3 percent are indirect anaphors. The remaining 6 percent are Discourse-new. As we have seen, though, most of them are either cataphoric or deictic, or else can be interpreted as Hearer-old.

### 2.3. Information status of the Elfred se cyning constructions

Let us now consider the information status of the Ælfred se cyning constructions in the texts of Orosius, Bede's History and the Chronicle (Manuscripts A and E). The data for each text are given in separate tables, namely in Tables 5, 6 and 7 below. Table 8 shows the combined data for all three texts. The tables include data for the structures in which the common noun was preceded either by $s e$ alone or by $s e$ and a pre-modifying adjective.

Table 8 shows that, in contrast to the se cyning Ælfred constructions, only 6 percent of which were Discourse-new, there are quite a few Discourse-new Ælfred se cyning structures 26.9 percent of the total number of Ælfred se cyning structures in the three texts.

Table 5: Alfred se cyning structures in Orosius

|  | Discourse-Old | Inferrable | Discourse-New |
| :--- | :---: | :---: | :---: |
| consul | 52,5 | 0 | 49,5 |
| cyning | 31 | 3 | 23 |
| casere | 10 | 0 | 4 |
| cwene | 1 | 0 | 3 |
| latteow | 0 | 0 | 2 |
| degn | 1 | 0 | 0 |
| ealdormon | 1 | 0 | 0 |
| nunne | 0 | 0 | 1 |
| Total | 96.5 | 3 | 82.5 |
|  | (includes 7 constructions |  |  |
| with adjectives) |  | (includes 9 constructions <br> with adjectives) |  |

Table 6: Elfred se cyning structures in Bede's History

|  | Discourse-Old | Inferrable | Discourse-New |
| :--- | :---: | :---: | :---: |
| cyning | 104 | 1 | 8 |
| biscop | 57 | 0 | 9 |
| papa | 11 | 4 | 4 |
| abbud | 9 | 2 | 1 |
| abbudisse | 2 | 0 | 2 |
| arcebiscop | 10 | 0 | 1 |
| casere | 13 | 0 | 6 |
| cwen | 6 | 2 | 0 |
| (meesse)preost | 2 | 0 | 0 |
| ealdorman | 2 | 0 | 1 |
| Total | 216 | 9 | 32 |
|  | (includes 13 constructions | (includes 1 construction with | (includes 10 constructions |
|  | with adjectives) | an adjective) | with adjectives) |

Table 7: Alfred se cyning structures in the Chronicle

|  | Discourse-Old | Inferrable | Discourse-New |
| :---: | :---: | :---: | :---: |
| cyning | E: 4 | E: 1 | E: 2 |
|  | A: 2 | A: 1 | A: 1 |
| eorl | E: 2 | E: 0 | E: 0 |
|  | A: 0 | A: 0 | A: 0 |
| biscop | E: 2 | E: 0 | E: 1 |
|  | A: 2 | A: 0 | A: 1 |
| crcebiscop | E: 2 | E: 0 | E: 0 |
|  | A: 1 | A: 0 | A: 0 |
| ealdorman | E: 0 | E: 0 | E: 1 |
|  | A: 0 | A: 0 | A: 1 |
| abbod | E: 1 | E: 0 | E: 0 |
|  | A: 0 | A: 0 | A: 0 |
| ceðeling | E: 1 | E: 0 | E: 1 |
|  | A: 1 | A: 0 | A: 1 |
| papa | E: 4 | E: 2 | E: 3 |
|  | A: 1 | A: 1 | A: 1 |
| casere | E: 0 | E: 0 | E: 0 |
|  | A: 0 | A: 0 | A: 2 |
| cwen | E: 2 | E: 0 | E: 0 |
|  | A: 0 | A: 0 | A: 0 |
| pegn | E: 0 | E: 0 | E: 1 |
|  | A: 0 | A: 0 | A: 0 |
| Total | E: 18 | E: 3 | E: 9 |
|  | (includes 9 constructions with adjectives) | A: 2 | (includes 5 constructions with adjectives) |
|  | A: 7 |  | A: 7 |
|  | (includes 3 constructions with adjectives) |  | (includes 2 constructions with adjectives) |

Table 8: Ælfred se cyning structures in Orosius, Bede and the Chronicle

| Discourse-Old | Inferrable | Discourse-New | Total |
| :---: | :---: | :---: | :---: |
| 337.5 | 17 | 130.5 | 485 |
| $(69.6 \%)$ | $(3.5 \%)$ | $(26.9 \%)$ |  |

None of the 16 Discourse-new Alfred se cyning structures in Manuscripts A and E of the Chronicle can be interpreted as either cataphoric or deictic. Neither do they seem likely to have been mistakes on the part of the scribes. Except for one example in Chronicle E, they all have Discourse-new Ælfred se cyning equivalents in other manuscripts. ${ }^{5}$

28 out of the 82.5 Discourse-new Alfred se cyning constructions in the Orosius and 16 out of the 32 Discourse-new Alfred se cyning structures in Bede's History appear in Chapter Headings. Therefore, for the reasons outlined in Section 2.2, they can be regarded as cataphors. This means that 44 out of 130.5 Discourse-new Flfred se cyning structures in our texts, which is about 34 percent, can be interpreted as cataphoric.

[^80]Table 9: Alfred cyning constructions with titles in the Chronicle

|  | Discourse-Old | Inferrable | Discourse-New |
| :---: | :---: | :---: | :---: |
| cyning | E: 142 | E: 1 | E: 13 |
|  | A: 95 | A: 0 | A: 16 |
| eorl | E: 78 | E: 0 | E: 22 |
|  | A: 1 | A: 0 | A: 11 |
| biscop | E: 41 | E: 0 | E: 45 |
|  | A: 10 | A: 0 | A: 19 |
| crcebiscop | E: 55 | E: 0 | E: 8 |
|  | A: 22 | A: 0 | A: 5 |
| ealdorman | E: 29 | E: 0 | E: 33 |
|  | A: 8 | A: 0 | A: 21 |
| abbod | E: 13 | E: 0 | E: 18 |
|  | A: 0 | A: 0 | A: 7 |
| ¢ðટling | E: 11 | E: 0 | E: 7 |
|  | A: 1 | A: 0 | A: 4 |
| papa | E: 10 | E: 0 | E: 3 |
|  | A: 3 | A: 0 | A: 3 |
| (meesse)preost | E: 2 | E: 0 | E: 6 |
|  | A: 0 | A: 0 | A: 6 |
| cwen | E: 0 | E: 0 | E: 2 |
|  | A: 0 | A: 0 | A: 3 |
| abboðessa | E: 0 | E: 0 | E: 1 |
|  | A: 0 | A: 0 | A: 1 |
| типис | E: 0 | E: 0 | E: 2 |
|  | A: 0 | A: 0 | A: 0 |
| Total | E: 381 | E: 1 | E: 160 |
|  | A: 140 | A: 0 | A: 96 |

Table 10: Ælfred cyning constructions with titles in Bede

|  | Discourse-Old | Inferrable | Discourse-New |
| :--- | :---: | :---: | :---: |
| cyning | 15 | 0 | 0 |
| Biscop | 42 | 0 | 2 |
| arcebiscop | 11 | 0 | 0 |
| casere | 5 | 0 | 2 |
| (mæesse)preost | 3 | 0 | 2 |
| abbud | 3 | 0 | 1 |
| abbudisse | 3 | 0 | 1 |
| papa | 2 | 1 | 0 |
| munuc | 1 | 0 | 1 |
| Total | 85 | 1 | 9 |

### 2.4. Information status of the Ælfred cyning constructions

In the Ælfred cyning type of structure the common noun appears on its own, without a determiner or a pre-modifying adjective. The data for the constructions come solely from the Chronicle and Bede's History, because in the whole text of Orosius there is only one example of an Alfred cyning structure (see Sielanko-Byford 2013).

Table 11 shows that, as in the case of the Ælfred se cyning constructions, about 30 percent of the Elfred cyning structures are Discourse-new. Only one of those appears in Chapter Headings in Bede's Historia Ecclesiastica and can, possibly, be interpreted as cataphoric.

Table 11: Elfred cyning constructions with titles in the Chronicle and in Bede

| Discourse-Old | Inferrable | Discourse-New | Total |
| :---: | :---: | :---: | :---: |
| 606 | 2 | 265 | 873 |
| $($ c. $70 \%)$ |  | (c. $30 \%)$ |  |

### 2.5. Summary

As can be seen from the data presented in the preceding sub-sections, all three construction types with proper names and titles, that is the Ælfred cyning, Ælfred se cyning and se cyning Ælfred constructions, tend to be used to refer to an entity which occurs earlier in the discourse, that is they are as a rule Discourse-old. In other words, they tend to function as anaphors. Out of the three types, the se cyning Alfred construction, seems to be the most anaphoric one, with 91 percent of such structures used as direct anaphors and 3 percent as indirect anaphors, or Inferrables, and only 6 percent are Discourse-new. We also observed that most of the Discourse-new se cyning Ælfred constructions are either cataphoric or deictic.

## 3. Discourse-old structures

In this section we examine more closely the Discourse-old structures in our texts. We have been referring to them as anaphors since they all have 'antecedents' in preceding discourse. However, some of them are separated from their 'antecedents' by a considerable amount of text. The question is: can they still be treated as anaphors? After all, anaphora - both direct and indirect are devices used for establishing 'the local coherence of a discourse' (Strube 2007: 207).

What will need to be decided, then, is which of the Discourse-old constructions have local antecedents and can therefore be described as anaphoric and which cannot be viewed as such because the previous mention of the referent is too distant for us to be able to regard it as the antecedent.

Traugott and Pintzuk's (2008: 68) test for anaphoricity restricts the text to the preceding ten finite clauses in their coding system used for Old English data. Such an approach, however, takes into account only the linear distance between the two mentions of the same referent. This, in turn, implies that

> discourse is made up of an undifferentiated string of clauses which follow one another in time but do not form larger units that could perform communicative functions in relation to one another. [...] Text structure and attention flow must thus be flat and undifferentiated in this model of discourse.
(Fox 1987: 158-159)
In the present paper, the antecedent will be considered local if it occurs either in the same or the preceding chapter in the case of Bede's History and Orosius and in the same or the preceding entry in the case of the Chronicle. If the 'antecedent' appears further away, it is considered to be distant and as such too remote for a relation of anaphoricity to exist between the previous and the next mention of the referent. Such an approach will enable us to take into account not only linear distance but also the hierarchy of discourse. This is important because
there is a difference between an antecedent appearing, for instance, three or four entries away from the next mention of the referent and an antecedent appearing in the same or the immediately preceding entry, even when the linear distance is the same, say six or seven sentences. In the former case the focus will have shifted and so the 'anaphor' can no longer be easily associated with the 'antecedent'. In other words, they are in different anchoring domains (cf. Schwartz-Friesel 2007: 16). When they occur in the same entry or in the immediately preceding one, they are much more likely to be in the same anchoring domain. ${ }^{6}$

Of course, neither 'the linear-distance approach' nor 'the hierarchy approach' is perfect. If we adopt 'the hierarchy approach' there is, at least theoretically, a risk of classifying a construction as anaphoric, because the antecedent appears in the same or in the preceding entry or chapter and so it is regarded as local, even when the antecedent is very distant, for instance some twenty or thirty sentences away from the next mention of the referent. However, as shown later in the text, our data demonstrates that there is a strong correlation between the linear distance and the locality of the antecedent decided about on the basis of the hierarchy of discourse.

### 3.1. Discourse-old structures of the type se cyning Alfred

Let us consider the data for Discourse-old se cyning Ælfred constructions in Orosius, Bede's History, and in Chronicles A and E:

Table 12: Discourse-old se cyning Alfred structures in Orosius, Bede and the Chronicle

|  | Local antecedent |  | Distant 'antecedent' |
| :---: | :---: | :---: | :---: |
|  | Antecedent in the same chapter/entry | Antecedent in the preceding chapter/entry | Previous mention more remote |
| Discourse-old se cyning Alfred structures in Orosius | 11 <br> (includes 4 constructions with adjectives) | 0 | 2.5 |
| Discourse-old se cyning Ælfred structures in Bede | 30.5(includes 26 constructions <br> with adjectives) | 11.5 <br> (includes 6 constructions with adjectives) | 19.5(includes 11 constructions <br> with adjectives) |
| Discourse-old se cyning Alfred structures in the Chronicle | E: 112 (includes 4 constructions with adjectives) A: 5 (includes iconstruction with an adjective) | E: 61 (includes 2 constructions with adjectives) <br> A: 2 | E: 35 (includes 6 constructions with adjectives) <br> A: 4 <br> (includes 1construction with an adjective) |
| Total of Discourse-old se cyning Ælfred structures in Orosius, Bede and the Chronicle: 294 | 158.5 <br> Local 23 | $\begin{array}{ll}  & 74.5 \\ \text { ecedent: } \\ \\ \hline .2 \%) & \\ \hline \end{array}$ | Distant 'antecedent': $61 \text { (20.7\%) }$ |

[^81]The data in Table 12 show that an overwhelming majority of Discourse-old se cyning Elfred constructions (almost 80 percent) have a local antecedent and can therefore be considered anaphoric. What is more, the 158.5 examples which have an antecedent in the same structural unit, that is in the same chapter or entry, constitute over 50 percent of all the se cyning Alfred constructions in our three texts. We thus get further confirmation of the anaphoric nature of such structures.

### 3.2. Discourse-old structures of the type Ælfred se cyning

The findings for Discourse-old Elfred se cyning structures in the three texts examined are as follows:

Table 13: Discourse-old Ælfred se cyning structures in Orosius, Bede and the Chronicle

|  | Local antecedent |  | Distant 'antecedent' |
| :---: | :---: | :---: | :---: |
|  | Antecedent in the same chapter/entry | Antecedent in the preceding chapter/entry | Previous mention more remote |
| Discourse-old <br> Elfred se cyning <br> structures in Orosius | 47.5 <br> (includes 2 constructions with adjectives) | 11 <br> (includes 3 constructions with adjectives) | 38(includes 2 constructions <br> with adjectives) |
| Discourse-old Alfred se cyning structures in Bede | $\begin{gathered} 97 \\ \begin{array}{c} \text { (includes } 2 \text { constructions } \\ \text { with adjectives) } \end{array} \end{gathered}$ | 40 <br> (includes 1 construction with an adjective) | 79 <br> (includes 10 constructions with adjectives) |
| Discourse-old Elfred se cyning Structures in the Chronicle | $\begin{aligned} & \text { E: } 1 \\ & \text { A: } 0 \end{aligned}$ | E: 5 <br> (includes 2 constructions with adjectives) <br> A: 4 <br> (includes 1 construction with an adjective) | E: 12 (includes 7 constructions with adjectives) A: 3 (includes 2 constructions with adjectives) |
| Total of <br> Discourse-old <br> Elfred se cyning structures in Orosius, <br> Bede and the Chronicle: <br> 337.5 | 145.5 <br> Local 205 | 60 <br> cedent: <br> 61\%) | Distant 'antecedent': <br> 132 <br> (c. $39 \%$ ) |

As we can see, a considerable number of Discourse-old Ælfred se cyning constructions have a local antecedent, namely 61 percent. Nevertheless, the percentage is lower than that of Discourse-old se cyning Ælfred structures, almost 80 percent of which have local antecedents. The percentage of Discourse-old Ælfred se cyning structures which have an antecedent in the same structural unit is also lower than was the case with the se cyning Alfred constructions: they constitute 30 percent of the total of the Elfred se cyning structures found in all the three texts.

### 3.3. Discourse-old structures of the type Ælfred cyning

The data for Discourse-old the Ælfred cyning structures are presented in Table 14 below:

Table 14: Discourse-old Ælfred cyning structures in Bede and the Chronicle

|  | Local antecedent |  | Distant 'antecedent' |
| :--- | :---: | :---: | :---: |
|  | Antecedent in the <br> same chapter/entry | Antecedent in the <br> preceding chapter/entry | Previous mention <br> more remote |
| Discourse-old <br> Ælfred cyning <br> structures in Bede | 34 | 10 | 41 |
| Discourse-old <br> flfred cyning <br> structures in the Chronicle | A: 33 | E: 88 | A: 32 |

The data in Table 14 show that of all the three structure types the lowest percentage of the Ælfred cyning structures have local antecedents. The percentage of Discourse-old Ælfred cyning structures which have an antecedent in the same structural unit is also quite low: they constitute less than 30 percent of the total of the Elfred cyning structures found in all the three texts.

### 3.4. Linear distance between the structures and their antecedents

Our data show a strong correlation between the locality of the antecedent as determined by the hierarchy of discourse and the linear distance between a given construction and the previous mention of the referent.

The majority of the constructions which we classified as anaphoric taking into account the structure of discourse occur less than 10 sentences away from the previous mention of the referent. For 93 percent of constructions with an antecedent in the same entry or chapter the distance between the antecedent and the anaphor is 10 sentences or less. Moreover, almost half of these structures have an antecedent in the same or adjacent clause. As for constructions with the antecedent in the previous entry or chapter, for 82 percent of them the distance between the antecedent and the anaphor is 10 sentences or less. Therefore, all these structures would also be regarded as anaphors if the linear distance was used as a criterion for anaphoricity.

The results for structures with an 'antecedent' in a more distant entry or chapter, as might have been expected, are in complete contrast to what we found for those with local antecedents: only in the case of 18 percent of the constructions whose 'antecedent' we have considered 'hierarchically distant' does the previous mention appear within the 10 preceding sentences.

As was the case with 'hierarchical distance', when we take linear distance into account, the se cyning Ælfred constructions also seem to have more 'local' antecedents: 60 percent of the 158.5 constructions whose antecedents appear in the same structural unit have
antecedents which occur in the same or in the adjacent sentence, or are separated from the anaphor by one sentence only. In contrast, only 38 percent of such Ælfred se cyning and 31 percent of such Ælfred cyning structures have equally 'close' antecedents.

### 3.5. Summary

In this section we have examined the Discourse-old structures found in the three Old English texts examined here. Almost 80 percent of Discourse-old se cyning Ælfred constructions were found to have a local antecedent, which confirmed their anaphoric nature. A smaller proportion of Discourse-old Ælfred se cyning and Ælfred cyning structures had local antecedents, around 60 and 50 percent respectively.

It was also mentioned that a higher proportion of the se cyning Ælfred constructions than of structures of the other two types had an antecedent in the same structural unit and a higher proportion of those antecedents had closer antecedents when linear distance was considered.

## 4. Inferrables

Among the constraints on the associability of indirect anaphors mentioned by Schwarz-Friesel (2007: 16) is 'associability within one anchoring domain.' In other words, the trigger (or anchor), that is the element in relation to which the inferrable is interpreted, should be local.

It should be noted that all the 28 examples of the Elfred cyning, Elfred se cyning and se cyning Alfred constructions classified as Inferrables in Tables 1-11 above have local triggers; the anchor always appears in the same chapter or entry. Moreover, in 24 out of the 27 examples, the anchoring element is either intrasentential, that is it appears in the same sentence as the Inferrable (examples 8 and 9 ), or else it occurs in the immediately preceding sentence (example 10). For instance:
(8) Bede2 16.150.5 ${ }^{7}$ Hoxfdon heo swylce mid him Eanflode Eadwines dohtor \& Wuscfrean his sunu, swylce eac Yffe his suna sunu Osfriðes, ða eft seo modor cefter pon onsende for Eadbaldes ege \& Oswaldes para cyninga in Gallia rice to fedanne Daegbrehte parm cyninge, se was hire freond. ${ }^{8}$
'They had also with them Eanfleda daughter of Eadwine and his son Wuscfrea, as well as Yffe his son Osfrith's son. These their mother afterwards, for fear of the kings Eadbald and Oswald, sent to Gaul to be brought up by king Dagobert, who was her friend.' (translation taken from Miller 1890-98: 151)
(9) ChronE 1137.68 he for to Rome. \& por was weel underfangen fram pe pape Eugenie. 'He went to Rome and was well received by Pope Eugenius there.'
(10) Bede3 21.248.14 Pa he pa Wigheard to Rome becwom, cer pon he to biscophade becuman meahte, was mid deaðe forgripen \& pcer fordferde. 21.248.17 Đa sende Uitalius se papa Osweo Seaxna cyninge lufsumlic cerendgewrit, pa he onget his aarfoestnesse willan \& his hate Godes lufan [...].

[^82]'On Wigheard's arrival in Rome, before he could be made bishop, he was there attacked by mortal illness and died. Then pope Vitalius sent a loving letter to Oswio, king of the Saxons, as he understood his pious devotion and his warm love to God[...].' (translation taken from Miller 1890-98: 249)

In the remaining 3 examples the anchoring element is separated from the Inferrable by between 1 to 4 sentences (example 11 below):
(11) Bede5 17.454 .27 mid by he pa fela monpa ber gesceligum gelesum geornlice abysegad wces, ba hwearf he eft on Gallia rice to Dalfino pam bysceope his freonde, \& preo winter was mid him wuniende.17.454.30 \& he was to preoste besceoren fram him, \& on swa micelre lufan haefd was, paet he pohte hine him to yrfewearde gedon.17.456.2 Ac bæet hwœebere swa wesan ne mihte, forðon se bysceop wees forgripen mid weellhreowe deaðe, \& Willfrið woes ma gehealden Angelpeode to bysceope.17.456.4 Sende Balthild seo cwen mycel weorod, \& het pone bysceop ofslean.
'And when he had zealously occupied himself for many months there in successful study, he returned again to Gaul to his friend bishop Dalfinus and remained with him for three years. And from him he received priestly tonsure, and was treated with such affection that the bishop intended to make him his heir. But yet this might not be, for the bishop was carried off by a cruel death, and Wilfrid was reserved instead to be bishop to the English. Queen Balthild sent a large force and ordered the bishop to be slain.' (translation taken from Miller 1890-98: 455, 457)

All the examples of indirect anaphora presented here as well as the other examples found in our data are what Schwarz-Friesel (2007: 8-9) calls conceptual anaphors, since their interpretation involves 'the processing of [...] general world knowledge' rather than 'the activation of knowledge in the mental lexicon', as is the case with semantic indirect anaphora. In (8) and (11) above the interpretation of the anaphor requires the activation of scriptknowledge or the frame that a kingdom has a king or a queen (cf. Heusinger 2007: 142). For the interpretation of (9) and (10) some 'encyclopedic' knowledge is necessary to enable the reader to associate a pope with Rome (cf. Heusinger 2007: 142).

Summing up our findings, all of the Inferrables found in our texts have local triggers and can therefore be considered anaphors, although indirect ones.

## Conclusion

In the present paper we have investigated the information status of Old English constructions with proper names and titles. An overwhelming majority of the se cyning Ælfred constructions (around 91 percent) were found to be Discourse-old, that is they referred back to an entity mentioned earlier in the discourse. Around 70 percent of both Ælfred se cyning and Ælfred cyning structures also turned out to be Discourse-old.

Almost 80 percent of the Discourse-old se cyning Elfred constructions were found to have a local antecedent, which confirmed their anaphoric nature. A smaller proportion of the Discourse-old Ælfred se cyning and Ælfred cyning structures had local antecedents, around 60 and 50 percent respectively.

We also saw that a higher proportion of the se cyning Ælfred constructions than the structures of the other two types had an antecedent in the same structural unit and a higher
proportion of those constructions had closer antecedents when linear distance was considered.

This anaphoric nature of the se cyning Ælfred structures could provide an explanation for the very few examples of such constructions in Chronicle A, in the earlier entries of Chronicle E and in Orosius. In our data the se cyning Ælfred structures mainly appear in Bede's History and in later entries of Chronicle E (as well as in post-1121 interpolations). Bede's History and later entries of Chronicle E are full of longer descriptions featuring one or more main characters: kings, archbishops, bishops or other important people of the day. Anaphora are needed to refer back to an entity that appeared earlier in the text. Anaphoric chains are formed. Most of the entries of Chronicle A and earlier entries in E (except for the Interpolations, of course) are short, there is usually no opportunity for the same referent to appear more than once or - possibly - twice in the same entry. Most of the text of Orosius contains summaries of the main events at a given period in the history of ancient Rome. Unlike Bede's History, it does not contain long stories about saintly kings, queens, bishops and priests, stories in which the same character is mentioned repeatedly, requiring anaphoric expressions to be used. Therefore, there is no need for the use of se cyning Alfred constructions either in Orosius or in Chronicle A.

Our findings related to the information status of the constructions with proper names and titles discussed in this study clearly show that there is a need for further research. Some results of our analysis of Discourse-old structures in particular demonstrate that there are interesting facts to be investigated in connection with anaphoric distribution in Old English. For example, we discovered over 50 percent of all se cyning Ælfred structures in our data had an antecedent in the same discourse structural unit. This seems to go against the central prediction of one of the main approaches to discourse anaphora, the hierarchical approach, which claims that reduced anaphoric expressions, not full noun phrases, are normally used for subsequent mentions within the same structural unit. While an investigation of anaphoric encoding in Old English lies outside the scope of the present study, there is clearly more research to be done in this area.

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[^0]:    1 The study here focuses on the nominative-accusative languages, the observations concerning cases can be different for the languages with ergative-absolutive case systems. For more details concerning the theta roles of objects see Levin and Rappaport Hovav (2007).
    2 The remaining inflectional forms are still visible in the pronoun system in English.
    ${ }^{3}$ A detailed characteristics of this process is presented in McFadden (2002).

[^1]:    ${ }^{4}$ All the exemplary sentences are provided by the author and modeled on the examples in the literature, unless otherwise stated.
    5 Following symbols have been used with the data: '?' denotes the sentences with questionable grammaticality whereas ' $\%$ ' signals structures which are found acceptable by some percentage of the speakers of a given language.

[^2]:    6 The modern discussion of the structure of the DOC and the presence and function of prepositions in it was initiated by Emonds (1973), Oehrle (1976), and culminated in the polemic between Larson $(1988,1990)$ and Jackendoff (1990).
    7 However, as pointed out by an anonymous reviewer, this is not always the case, since Liverpool indirect passive is actually derived from the Prepositional Dative and is not related to the DOC, as discussed by Biggs (2015).

[^3]:    ${ }^{8}$ Actually, Harley (2002) bases her proposal on Pesetsky's (1995) representation of the DOC, with a PP headed by an empty Preposition G with modifications suggested by Kayne (1994).
    9 The Applicative Phrase has been proposed by Pylkkänen (2002), published as Pylkkännen (2008). She claims that if the Applicative is merged below the verb, it instantiates the Low Applicative, if it merges above the verb then it is the High Applicative. Cuervo (2003) further modifies this classification adding the Affected Applicative, a particular form of the High Applicative, present in languages like Spanish or German.
    ${ }^{10}$ Other proposals concerning the structure of the DOC in English have been made, e.g., Haddican and Holmberg (2011) with a linking element (a Linker) or Grashchenkov and Markman (2008) with applicativised verbs in addition to the Applicatives.

[^4]:    ${ }^{11}$ Our observation is valid for the languages discussed, but the properties of the dative case may differ crosslinguistically.

[^5]:    ${ }^{12}$ The term symmetric passive has been used in the literature to denote the ability of either direct or indirect object to become a subject of a passive sentence.
    ${ }^{13}$ Similar representations were proposed in e.g. Larson (1988) or Jackendoff (1990) although instead of $v$, they propose an additional projection of V , which functions in the same manner as v - the subject merges in its Specifier position.
    ${ }^{14}$ The term 'Information Structure' is described by Chafe (1976) as a packaging of information conveyed in an utterance. Krifka and Fery (2008) provide additional characteristics of this 'packaging': they define Information Structure as the techniques that optimize the form of the message with the goal that it be well understood by the addressee in the current attentional state. Information Structure contains categories such as: Focus, Topic and Givenness.

[^6]:    ${ }^{15}$ The issue of Topicalization in English is not as straightforward as we characterise it here. A detailed analysis of this phenomenon and evidence supporting our claim is offered by e.g. Erteschik- Shir (2006), Prince (1981), Speyer (2010), Tajsner (1998, 2008).
    ${ }^{16}$ The pronouns are used as an addition to DPs to signal the changes of the case marking.
    ${ }^{17}$ In our representations we utilise Rizzi's $(1997,2004)$ Split-CP proposal and his version of the Relativised Minimality.

[^7]:    ${ }^{18}$ Whereas the process of Pied-Piping seems to be common cross-linguistically, P-Stranding does not occur as freely. Several accounts of this phenomenon have been proposed, e.g. van Riemsdijk (1978), Hornstein and Weinberg (1981), a more recent explanation utilizing the theory of phases has been put forward by Abels (2003).

[^8]:    1 VNs in modal constructions, as in (27a) (but also in prospective and perfective ones) are infinitives, because they are preceded by the leniting particle $a$ and the object noun in the accusative case. In the progressive construction (27b), the VN is interpreted as the present participle since it is preceded by the particle ag and it is followed by the object in the genitive case (McCloskey 1983; Doyle 2002; Bloch-Trojnar 2006; Carnie 2011).

[^9]:    a. fear pábhála sráide
    man pave-pres.prt.gen. street-gen.pl.
    'a man paving streets'
    b. Tá an tsráid pábháilte.
    is the street pave-PPRT

[^10]:    2 We cannot rule out the possibility that there are dialectal factors at play here.

[^11]:    * I would like to express my thanks to the two anonymous reviewers of this paper for their invaluable comments. All the errors the paper might contain, however, remain my responsibility.

[^12]:    ${ }^{1}$ Von Waldenfels (2012: 153) calls a structure such as (1) 'a modal passive'. However, we prefer to call it simply 'modal', without referring to its alleged passive character. Adopting the term 'modal passive' would force us to explain in what sense these sentences are passive, since they do not exhibit any passive morphology.
    2 The pronoun się is glossed throughout as 'się', instead of being treated as a reflexive pronoun, as it does not have a reflexive function in the structures analysed in the paper (we owe this remark to an anonymous reviewer).
    3 The following abbreviations have been used in the paper: acc - accusative, dat - dative, inf - infinitive, inst instrumental, nom - nominative, non-vir - non-virile, pl - plural, and sg - singular.

[^13]:    ${ }^{4}$ The verb in the present tense agrees with the subject in person and number only, while in the past, it shows agreement in person, number and gender, as can be seen in (i) below:
    (i) Te koszule dawały się prać (łatwo)
    these shirts-nom.pl.non-vir gave-3pl.non-vir się wash-inf easily
    'These shirts could be washed easily.'
    In (i) the verb agrees with the subject in the $3^{\text {rd }}$ person, plural number and non-virile gender.
    5 In example (i) below with the plural DP in front of the verb, we cannot easily determine the case form of the DP, as it is syncretic between the nominative and the accusative. No such syncretism appears in the singular, and for this reason the singular DP is used in (3) above:

[^14]:    ${ }^{8}$ It might be the case that się in middles has the same function as passive morphology in that it suppresses the projection of an external argument. This idea has been put forward by one of the reviewers of this paper, and it seems to be viable in the light of the lack of a syntactically active subject in middles (cf. section 4.1.2). We do not pursue the idea of się being equivalent to the passive morphology here, as this would require an analysis of the passive in Polish, which is outside the scope of this paper.
    9 Languages such as Greek and Italian use passive morphology in middles (Lekakou 2005:13, Krzek 2013:109).

[^15]:    ${ }^{10}$ Polish lacks reflexive passives, except for impersonal passives (cf. Kibort 2004: 290, 383), which might indicate that it should lack Type II middles; the contention we will argue against in section 4.3.
    ${ }^{11}$ Pitteroff (2014:32) refers to Type I middles as canonical middles.

[^16]:    ${ }^{12}$ Example (10) comes from the National Corpus of Polish.
    ${ }^{13}$ The adverb tatwo 'easily' appears in a different position in (10) and (11). In (10), the adverb is found in the sentence final position, while in (11) it occurs in front of the infinitive. The difference in the placement of the adverb might be reflected in the difference in meaning (cf. Ackema and Schoorlemmer 2005: 137). Compare:

[^17]:    ${ }^{14}$ Wierzbicka (1998: 219) characterizes involuntary agents as follows: "The agent experiences his own action as proceeding well (or not well) for reasons independent of him and unspecifiable".
    ${ }^{15}$ We will dwell on the dative DP in the modal dać się structure as in (15), after we have dealt with dative DPs in middles.
    ${ }^{16}$ Kit (2013: 6) notes that dative DPs found in Czech middles correspond to agents, while in Ukrainian they represent beneficiaries.

[^18]:    ${ }^{17}$ A similar test is used for Polish by von Waldenfels (2012: 158). For him, the non-dispositional continuation of the modal dać się structure is degraded (a single question mark).

[^19]:    ${ }^{18}$ One of the reviewers argues that middles can sometimes co-occur with specific time adverbials, as in (i) below:
    (i) Te pączki sprzedają się świetnie rano, ale po południu w ogóle.
    these donuts-nom.pl sell-pl się well morning but in afternoon at all
    'These donuts sell well in the morning, but they do not sell at all in the afternoon.'
    On the basis of the grammaticality of (i), the reviewer argues that middles do not necessarily have a generic reading, but may be regarded as describing events. Although this might be true, we seem to entertain a different hypothesis. Following Krfika et al. (1995), we believe that generic sentences do not have to refer to timeless truths, but instead the time when a certain property holds can be restricted (cf. Greenberg (1998), who discusses generic statements temporally restricted). When viewed from this perspective, (i) is not to be treated as episodic, but is a case of temporally restricted genericity, i.e. it is a property of donuts that they sell well in the morning.

[^20]:    ${ }^{19}$ One of the reviewers finds examples such as (35) marginal at best. However, in the National Corpus of Polish, one can come across examples such as (i) below, reproduced after von Waldenfels (2012: 164), which contains the agentive przez-phrase:
    (i) Problem zabezpieczenia kraju w żywność nie da się rozwiązać przez samego pana ministra. problem-nom.sg of-supplying country-gen in food not give-sg się solve-inf by himself mister minister 'The problem of supplying the country with food cannot be solved by the minister himself.'
    ${ }^{20}$ One of the reviewers finds the sentence in (37) degraded. (37) might sound better if one imagines a world in which spells exist that can be cast by a magician only when he/she is not forced to cast them (cf. Pitteroff 2014:198, footnote 15).

[^21]:    ${ }^{21}$ Grimshaw and Vikner (1993) argue that the presence of obligatory adjuncts is linked with the event structure of the verb. They note that "the adverbial requirement for middles seems to be narrower than would be expected for obligatory adjuncts" (Grimshaw and Vikner 1993: 145), and they leave this problem as an open question.

[^22]:    ${ }^{4}$ These accounts take the copula to be a semantically empty functional category. Rothstein (2000, 2001), however, provides numerous arguments in support of her claim that the copula does have its own semantic contribution.

[^23]:    Hungarian) in non-veridical contexts (see Fong 2003, and Dalmi 1994, 2002, 2005):
    (i) Mari ${ }_{j}$ öreg-en ${ }_{k}$ látta ismét az apjátk.

    Mary old-ess saw again the father.POSS.ACC
    'Maryj saw her fatherk again (when) oldk.'
    (ii) Mari túl öreg-nek látta az apját.

    Mary too old-dat saw the father.poss.ACC
    'Mary found her father too old.'
    (iii) Toini tuli kotiin sairaa-na.

    Toini came home ill-ess
    'Toini came home ill.'
    (iv) Toini näytää sairaa-lta.

    Toini seems ill-ABL
    'Toini seems ill.' (modelled on Fong 2003)

[^24]:    6 Moltmann (2013) proposes a further division of abstract states into atomic and particularized objects. She calls the latter "tropes".

[^25]:    7 "Life-time effect": the habitual property reading in past tense copular sentences implies that no change of state can be expected any longer (e.g. because the person is dead) (see Camacho 2012: 459).

[^26]:    8 Frame-setting and other event-external locative adverbials must be excluded from the range of possible eventuality tests as they are VP-external adjuncts that have no bearing on event structure (see Maienborn 2001).

[^27]:    9 Verbs like arrive and return are alternative triggers (Beck 2007); they may introduce an $\mathrm{OP}_{\text {alt }}$ operator, which binds the temporal variable of non-verbal adjunct predicates in accessible worlds (examples from Camacho 2012: 468):
    (i) Greta llego contenta/*inteligente.
    'Greta arrived happy/*intelligent.'
    When a perception verb selects a non-finite clause or a small clause as its complement, it has the direct perception reading (Akmajian 1977). Direct perception restricts the discourse domain to the actual world, hence it excludes the habitual property interpretation:

[^28]:    ${ }^{10}$ While the existing accounts of alternative sets (e.g. Beck 2007, Magri 2009) take the ALT or EXH operators to be choice functions, the present proposal views $\mathrm{OP}_{\text {alt }}$ as an intensional operator ranging over accessible worlds, as in Kratzer's (1991) theory of relative modality.
    ${ }^{11}$ On the "rich structure" assumed for all small clauses cross-linguistically, see Dalmi (2010a,b) and section 4.2 of this paper.

[^29]:    ${ }^{12}$ Unless otherwise indicated, the Russian data were kindly provided and carefully checked by Ekaterina Chernova.
    ${ }^{13}$ Although these semantic tests are demonstrated on Russian data, they are assumed to carry over to other languages.

[^30]:    ${ }^{14}$ See Bailyn (2011) for a critical review of the syntactic accounts of the zero/lexical verb variation in Russian copular sentences, and Partee and Borschev (2007) for a discourse-semantic analysis of the same.
    ${ }^{15}$ See Pereltsvaig (2007) for a structural account of the interpretive differences found in Russian copular sentences; see den Dikken (2006), Dalmi (2010b, c), and Bondaruk (2013) for arguments against her account.

[^31]:    ${ }^{16}$ See Heycock (1994, 2012), Heycock \& Kroch (1998) for a similar view.
    ${ }^{17}$ Citko's $(2007,2008)$ mono-clausal account is problematic for a number of reasons listed by Dalmi (2010b,c). Those relevant for the present discussion are repeated here:
    i. predication relation is not treated in a uniform way;
    ii. finite and non-finite copular constructions need to be assigned different structures;
    iii. cross-linguistic ad hoc/habitual variation cannot be accommodated.

[^32]:    ${ }^{17}$ The Revised Predication Licensing Principle (RPLP) (Dalmi 2005: 95) is given as follows:
    Predication relation is syntactically realized by the [+pred] feature, and must be licensed on the left edge of the functional layer (TP, AgrP or PiP) in each clause.

    19 This provides independent evidence for locating the pronominal copula under the T 0 head crosslinguistically, see Doherty (1996) for Irish, Eid (1991) for Arabic, Doron (1983, 1986) for Hebrew and Citko ( 2007,2008 ) for Polish. The zero copular predicate is the null head of the VP projection (see Fassi-Fehri (1993) for Arabic, Partee (1998) for Russian and Dalmi (2010b,c; 2013) for Hungarian).

[^33]:    ${ }^{1}$ For a possible use of a Null Operator in certain marginal or obsolescent relatives, see Grosu (1994, section 8.3). These constructions are not relevant to what follows, and will not be further discussed in this paper.

    2 As far as our own intuitions, as well as those of most native speakers we have consulted, are concerned, care is completely excluded in all the sub-cases of (6). At the same time, there appears to be some idiolectal variation in this respect. Thus, one anonymous reviewer of an earlier version of this paper reports that in (6a), but not in (6b,c), (s)he allows the use of care (preceded by the Accusative marker pe). For completeness, we note that Heim (1987) signals some idiolectal variation in English data like (2), some speakers allowing the use of who.

[^34]:    ${ }^{3}$ Existential quantification over the parts of a sum can in principle be achieved by an explicit partitive construction, such as:
    (i) Some of [the books that there are __ on the desk must be removed].

    This construction is unproblematic, because the complex NP is targeted by the definite article. What is disallowed is for existential quantification to target the complex NP directly.

    Grosu \& Landman (2016, section 2.3.1), echoing a remark in Carlson (1977), observe that data like the version of (16) with some can be significantly improved by emphatically stressing this item, and by correlatively interpreting this example as a 'truncated' version of an explicit partitive, in particular, of (i). We assume that the version of (16) at issue has, under such circumstances, the same semantics as (i), so that here, too, existential quantification does not directly target the complex NP. For similar facts in Romanian, see footnote 9 .

[^35]:    4 The full and reduced versions of (21) are in fact slightly modified versions of Kotek's (7a-b). We have removed the accusative marker $p e$ which she places before câţi, which causes ungrammaticality, at least in our speech.

[^36]:    5 In fact, even the kind of entity can differ, in which case, an overt distinct $N$ must be used in the appositive; e.g., if we insert mânji 'colts' after câţi in (26) (preferably suppressing și 'also', to improve overall coherence), we get an acceptable sentence. In contrast, if we perform this type of insertion in (24), we get an unacceptable result.

[^37]:    ${ }^{6}$ Grosu (2009) proposes an analysis of data like the reduced version of (21) which is built on the observation that the measure phrase denotes a unique value on a scale, and may thus be viewed as a proper name. The gist of the proposal is that the relevant construction is comparable to expressions like John as a judge.

    We are suspicious of this approach, because proper names are definite, and if what we propose in the text is on the right track, the constructions at issue must be analyzed as genuine indefinites.

[^38]:    7 Kotek (2013, section 5) non-committedly suggests an alternative way of trying to make sense of the (im)possibility of indefinite amount relative constructions in Romanian and English. Specifically, she suggests that in view of the null status of the English relativizer, one might assume that there is no Maximalization operation within English amount relatives, and that maximality comes from the determiners, whose range is limited (for some unexplained reason) to those that preserve maximality into the quantification.

    We find this alternative suggestion problematic for a number of reasons. First, it has no independent plausibility, since comparatives - as noted above in the text - exhibit clear maximality effects, although they use a null syntactic operator and there are no CP-external determiners that can serve as the source of maximality. Second, we do not see how maximality may be 'preserved into the quantification' when, by assumption, there is no CP-internal maximality to preserve. Third, we note that maximality was a crucial ingredient in Grosu \& Landman's analysis of entity-denoting data like (16), in that it created a unique entitydegree pair, on which SUBSTANCE could straightforwardly operate. In the absence of maximalization, it becomes unclear whether an equally simple account of the desired entity-denotation for the complex DP is feasible (in any event, Kotek was silent on this point).

    For all these reasons, we believe that our own conjecture provides a more promising basis for future crosslinguistic research.

[^39]:    8 We do not know why (26b) is slightly degraded with care, but whatever the reason, the version with cât seems to us distinctly worse.
    ${ }^{9}$ Example (34b) was brought to our attention by one of the reviewers. Concerning data with scalar quantitatives, we note the (marginal) existence of a further reading, illustrated by

[^40]:    This example can only be construed as a partitive construction of the kind noted in footnote (3), in which the partitive preposition, normally realized as din or dintre in Romanian, is exceptionally covert. The constituent representing the 'whole' is realized by the amount-relative, which functions here as a free relative (see (12a-b)).

[^41]:    ${ }^{1}$ Foodsemy is nicknaming from foodstuffs which means that names of various foodstuffs may be used to denote human qualities.
    ${ }^{2}$ Zoosemy is understood in the literature (Rayevska 1979: 165) as nicknaming from animals which means that names of animals are often used to denote human qualities.
    ${ }^{3}$ Plantosemy is understood as nicknaming from plants which means that names of plants are employed to denote human qualities.
    ${ }^{4}$ Following the $O E D$, despite the fact that prawn, when used with reference to persons, has been used as a term of contempt since the $19^{\text {th }}$ century ( 1845 You never saw such a human Prawn as he looked, in your life.), there is a single quotation suggesting that that the word could be used as an endearment ( 1895 I expect you're a saucy young prawn, Emma).

[^42]:    5 Terms of endearment have been taken from the OED, Oxford Dictionary of Slang and The Random House Thesaurus of Slang.

[^43]:    6 Note that at first tarts were filled with meat, fish, cheese or fruit. However, nowadays they are only filled with fruit preserve or other sweet confection.

[^44]:    1290 Alas bat ich scholde a-bide Pat mi child, mi swete heorte, swych cas schal bi-tide.
    1679 My Husband called to me, prithee, sweetheart, what hast thou got for my Supper?
    1977 Try harder, sweetheart, or I'll plug you in the guts.

[^45]:    7 We need to remember that in particular contexts endearments may be used ironically or contemptuously (see the development of sweetheart).
    8 The OED records only two cases of its existence:
    1485 A dere dewchesse, my daysyys Iee! 1605 Adeu, O desie of delyt.
    9 The $O E D$ attests only a single quotation from the $16^{\text {th }}$ century ( 1568 Giij , It is your deinty dearlyng, your princkoxe, your golpoll.). The form golpol comes from gold-pol. In turn, the existence of pinkany defined as

[^46]:    * I am very grateful to Silvio Cruschina, Maria del Mar Vanrell, Javi Fernández, Emilio Servidio, Francesc González i Planas, and especially Iván Ortega-Santos. My discussion with them all has definitely contributed to improve this paper. I am also thankful to the two anonymous reviewers of Linguistics Beyond and Within for their helpful and insightful comments and suggestions. This research has been partially funded by the Project FFI2013-41509-P of the Spanish Ministry of Economy and Competitiveness.

[^47]:    ${ }^{1}$ The subject moves to preverbal position for independent reasons concerning syntax. In this respect, it may seem that a preverbal subject is in a discourse position such as focus, but in fact it occupies a syntactic position such as spec-TP.
    2 Microvariation in syntax is an emerging field today. With respect to focus, Information focus fronting has been attested in Sardinian (Cruschina 2012; Remberger 2014), in Balearic Catalan and Spanish as spoken in the Basque Country (Vanrell and Fernández-Soriano 2013), etc. My goal in this respect is to contribute to this emerging fied with new data from SPS.

[^48]:    ${ }^{3}$ For a full description of other types of focus in terms of Contrastive and Mirative Focus, Quantifier Fronting and Resumptive Preposing, see Jiménez-Fernández (2015) and references therein. Throughout the paper I will assume that focus fronting targets the CP area, which is the standard view of the left periphery. However, the reader is referred to Camacho-Taboada and Jiménez-Fernández (2014) for an analysis of focus fronting as movement to spec-TP.
    ${ }^{4}$ In the data I have used examples in which the IF is part of a full sentence, thus avoiding what seems to be the most natural option, namely the elliptical clause. However, I have tried to avoid the word-by-word repetition of the question in the answer, since this would add to the clumsy flavour that answers echoing the material in the question have for speakers.

    In addition, I assume that (at least some) pre-verbal subjects are placed in the CP-domain, sitting in an A'position (Alexiadou and Anagnostopolou 1998; Barbosa 1995; Frascarelli 2007; among others). However, I depart from these authors in that I claim that this is not a topic position, rather it is a focus position.
    5 The term Standard Spanish refers to the standard variety of Spanish as spoken in the Iberian Peninsula. I am not taking into account American varieties, but surely to have a wider view of Focus Fronting. American varieties will be paid attention to in my future research.

[^49]:    6 Though contrast can be expressed in several other positions in the sentence, in this paper I deal with focus fronting to the CP system as shown in Rizzi (1997) and Zubizarreta (1998), among others.

[^50]:    7 Note that experimental work usually makes use of 7-point Likert scale (Sprouse and Almeida 2011). I have used just three options. My goal was to gather data (of an understudied variety [SSP]) rather than contributing to a specific debate in experimental literature on language processing.

[^51]:    8 As pointed out by an anonymous reviewer, prosody will help disambiguate this double reading of preverbal subjects. However, analysing the prosody of different types of foci falls outside the scope this paper and it is part of my own ongoing research.

[^52]:    ${ }^{9}$ I have not tested postverbal subjects with a CF interpretation in this survey. According to Ortega-Santos (2013: 112), in (at least some varieties of) Spanish, CF can occur in the right periphery, as illustrated in (i), his example:
    (i) A. He oído que ayer Juan lamenó haber comenzado el doctorado. have-1st.sg heard that yesterday Juan regret-past.3sg to-have started the PhD 'I have heard that yesterday Juan regretted having started the PhD.'
    B. Pero ¿qué dices? Ayer lamentó haber comenzado el doctorado PEDRO, ( $y$ no Juan). but what say-2.sg yesterday regret-past.3sg to-have begun the PhD Pedro, (and not Juan) 'What? Yesterday, it was Pedro, not Juan, who regretted having started the PhD.'

[^53]:    ${ }^{1}$ Content-based instruction is one of a number of names for a family of content-led approaches to language teaching. Others include content-based teaching (seen here as a synonym) and content and language integrated learning CLIL which Çekrezi (2011:3822) defines as 'an approach to teaching and learning where subjects such as science, history and geography are taught and studied through the use of a non-native language'.

[^54]:    ${ }^{2}$ Henceforth BS\&W (1989).

[^55]:    * I would like to thank Professor Magdalena Charzyńska-Wójcik for all her help with and comments on this paper.
    1 Cf. Charzyńska-Wójcik (2013: 77-84).

[^56]:    ${ }^{2}$ Cerquiglini (1999:36, quoted after Nichols 2013: 2) proposes to view it in the following manner:
    Medieval writing does not produce variants; it is variance. The endless rewriting to which medieval textuality is subjected, the joyful appropriation of which it is the object, invites us to make a daring hypothesis: the variant is never intermittent (ponctuel).
    ${ }^{3}$ From such an approach stem all the critical remarks hurled at the scribes whose errors and whimsy resulted in the divergences between the texts (Nichols 2011: 20) and who have been accused by textual critics 'of willful disobedience, or cheerful unconcern for the law charging that they should reproduce exactly what they saw in the exemplar (even if it looked like an error), or with plain stupidity' (Greetham 1994: 49), their worst virtue being the 'pernicious desire to do good' (Willis 1992, quoted in Greetham 1994: 49). This is well illustrated in the description of the scribe of the London manuscript of the Middle English Glossed Prose Psalter provided by the first editor of the text:

[^57]:    Judging from the mechanical manner in which he did his copying, he must have been a very ignorant man, who understood neither much Latin nor English, though we cannot blame him for excessive carelessness. In a certain way he has bestowed much attention on his original, and has apparently done his best to make an exact copy, writing letter by letter, so far as he could decipher the original before him, which very likely was difficult to read. He has very often produced most ridiculous results. In such cases he does not seem to have used his brains at all, but to have purposely abstained from making emendations. The blunders in the Latin text of the Psalter are legion.

[^58]:    4 The study is limited to the analysis of only two manuscript copies of the text as these are the manuscripts edited by Bülbring (1891), whose work is generally trusted. The text of the Cambridge MS with variants from the remaining manuscript copies is available in Black and St-Jacques (2012) but since this edition diverges in many places from Bülbring's (1891) edition it was decided to base the study exclusively on the latter (see Section 4).
    5 For a discussion of the etymological make-up of the nominal layer of the first fifty Psalms in the London and Dublin copies of MEGPP, see Lis (in press).

[^59]:    ${ }^{6}$ Although Deanesly (1920: 143) states unhesitatingly that MEGPP 'was translated from a French original' and Reuter (1938: [1]) contends that 'the so called Earliest Complete English Prose Psalter [i.e. MEGPP - my addition] was mainly based on a French version', I would not venture to draw hasty conclusions in this respect. As proved in St-Jacques (1989), MEGPP might be greatly indebted to the French glossed Psalter but does not follow it blindly for instance as far as some issues related to word-order are concerned.
    7 The following dictionaries have been employed for Latin, French and Middle English Psalters respectively: Whitaker's WORDS: Latin-to-English \& English-to-Latin Dictionary, Dictionnaire du Moyen Français, the Middle English Dictionary and the Oxford English Dictionary.

[^60]:    8 The low frequency items which were excluded are those represented by only one or two occurrences, which prohibits further analysis since it is not possible, in the case of these nouns, to draw any conclusions as regards the motivation behind the divergence.
    9 The information is provided after Bülbring (1891), who indicates the scribal spelling errors in this way: (Bülbring 1891) London MS. chaitiste (with a long s).

[^61]:    ${ }^{10}$ The shape of the Latin lemma presented here indicates that the different versions of the Gallicanum gathered in Charzyńska-Wójcik (2013) diverge at this point using different phonological forms of the noun.
    ${ }^{11}$ There is one more occurrence of this Latin noun, which has, however, been excluded from the study due to the fact that the shape in which its rendering is given in MEGPP D suggests that it translates both the lemma and the gloss, whereas there is no information in Black and St-Jacques (2012) about this verse being glossed in the Latin text.
    ${ }^{12}$ Bülbring (1891: 7) states that wikkenes is a result of a scribal mistake. However, since the word is listed in the Middle English Dictionary, it is treated independently of wikkednes(se in this study.

[^62]:    ${ }^{13}$ There is one occurrence of this item which, although glossed in Latin, does not preserve glossing in the translation so I have decided not to exclude it from the study.
    ${ }^{14}$ (Bülbring 1891) London MS. graue.
    ${ }^{15}$ (Bülbring 1891) London MS. uaches.
    ${ }^{16}$ The alteration between the different versions of the Gallican Psalters indicated here obtains for all occurrences of this Latin lemma. Interestingly, there are two more verses in the Psalter in which this noun is employed but in those the form opprobrium, opprobri $(i)$ is the dominant reading and what is more, both those occurrences are rendered by means of a gerund in MEGPP L, whereas in MEGPP D only one of them is.
    ${ }^{17}$ London MS depruse.
    ${ }^{18}$ This alteration between the different versions of the Gallican Psalter obtains for two occurrences of this Latin lemma: this one - verse 23.1 and the one in verse 26.15.

[^63]:    19 This alteration between the different versions of the Gallican Psalter obtains only in the case of this occurrence of the Latin lemma.
    ${ }^{20}$ There is one occurrence of this item which, although glossed in Latin, does not preserve the glossing in the translation, so I decided not to exclude it from the study.
    ${ }^{21}$ This is not a dictionary lemma since the word form given in the manuscript is a result of a scribal mistake and cannot be lemmatised to any noun listed in the Dictionnaire du Moyen Français.
    ${ }^{22}$ This alteration between the different versions of the Gallican Psalter obtains for two occurrences of this Latin lemma: this one (verse 33.16) and the one in verse 43.5.

[^64]:    ${ }^{23}$ In fact there is one more context where anima, animae appears in noun-noun construction (34.14) but there it is used in the dative case and is a Goal.
    ${ }^{24}$ The English translation provided here and in the following examples is given after Cunyus (2009).

[^65]:    * I would like to express my gratitude to the anonymous reviewers of my paper, who have not only pointed out some drawbacks of an early version of my work, but also have given me a new impulse and direction for my future studies on Old Church Slavonic.

[^66]:    ${ }^{1}$ In this paper we will use transliterations of the original Old Church Slavonic forms, which are obscure enough as they are. The system of transliteration has been adopted after Lunt (2001). The quotations are given line numbers from the Corpus Cyrillo-Methodianum Helsingiense. The first digit stands for a particular Gospel: Matthew (1), Mark (2), Luke (3), John (4). The next two digits give the number of a particular verse, while the remaining numbers mark sections of this verse (wherever applicable).
    2 Madariaga (2010) claim that statives were not marked with sę in OCS. We have been able to find such cases, albeit not very numerous (see 5 below), and consequently we uphold the position that statives are middle verbs after all.

[^67]:    ${ }^{3}$ Cennamo (1995:48-49), when she talks of split intransivity, stresses the fact that in Romance languages a distinction was made between unergative and unaccusative verbs marked by the reflexive marking se/sibi. It seems that a similar distinction is made in Old Church Slavonic, i.e. a distinction between intransitives of unaccusative type marked with se and unergatives, which are not marked at all.

[^68]:    ${ }^{4}$ Occasionally, when relevant data was not available therein, other Gospels from the same source have been quoted.
    5 The pronoun has a longer variant sebe, which is, however, rarely used, and only in focused contexts (see Lunt 2001).
    ${ }^{6}$ Prefixes will be given in bold characters in our paper, wherever relevant.

[^69]:    7 Compare, for instance, the transitive and the reflexive verbs in: 1080210 možeši me ištisti 'You may cure me' vs. 1080310 ištisti sę 'Be cured'.

[^70]:    ${ }^{8}$ Junghanns, Fermann, Lenertová (2011) present a view on anticausatives, which is the opposite. They are viewed as basically reflexive transitive structures, where the external argument is not specified for Agentivity. Here we adopt the opposite optics, i.e. reflexives are seen as a type of anticausatives, where the argument which is internal is nevertheless animate and Agentive.
    ${ }^{9}$ Possibly just one, as the verb ženiti sę 'get married' is used in our data for the male partner of a couple and then it should be classified as an anticausative verb.

[^71]:    ${ }^{10}$ Exceptions will be discussed in section 5 .

[^72]:    ${ }^{11}$ The root has been reconstructed from the forms of related verbs available in Slovnik jazyka staroslovernského (Lexicon linguae palaeosloveni).
    ${ }^{12}$ Notice that the view upon morpho-syntactic structure is here distinct form that recognized in the Nanosyntax in that the higher layers of structure do not have to automatically imply all the lower levels (see e.g. Pantcheva 2009). Stative verbs will not subsume the processual projection in their structures at all, in spite of the fact that they contain the middle voice projection and the characteristic morphological marking.
    ${ }^{13}$ The translations with 'get' do not suggest that there is some external force implied in the predication. English is poorer in anticausatives than OCS and hence analytic structures have to be used in translations from time to time.

[^73]:    ${ }^{14}$ Not all mental activity verbs require the Genitive complementation: E.g. moliti sę in the mental activity verb group does not take the Genetive case, but the Dative: pomoli se otcu tvoemu.DAT 1060610 'pray to your father'.

[^74]:    ${ }^{15}$ Actually, this sentence is grammatical with the meaning: 'While dressing up, I am boring somebody'. Consequently, the non-overt position is treated in causatives as argumental.

[^75]:    ${ }^{16}$ Just a single example in our data.
    ${ }^{17}$ In the original paper by Rokoszowa (1978) the term used is:strona zwrotna 'reflexive voice'.

[^76]:    * An earlier version of this article formed part of an unpublished PhD dissertation (see Sielanko-Byford 2013). The dissertation would not have been written if it had not been for the guidance and advice of Professor Adam Pasicki. I would, therefore, like to take this opportunity to express my gratitude to him for all the help I received. I would also like to thank the two anonymous reviewers for their helpful comments and suggestions. Needless to say, any mistakes in the article are entirely my own.

[^77]:    1 The term 'determiner' in relation to the Old English se 'the/that', is used pre-theoretically here. It is irrelevant to our analysis what the exact status of se was, namely whether it was a demonstrative or a 'true' determiner in the sense of, for example, Giusti (1997).

[^78]:    2 The examples from the Chronicle are cited by Short Title (ChronA, ChronE) and year following edition (Earle and Plummer 1952). Long entries are also cited by line no. assigned by the DOE.
    ${ }^{3}$ Unless otherwise stated, the translations are my own.

[^79]:    ${ }^{4}$ It is generally agreed that the annals up until at least 890 belong to the first compilation. Some scholars consider either the annal for the year 891 or the one for 892 as the last entry in the 'original chronicle.' (see, for instance Bately 1985: 7-9).

[^80]:    5 The exception is Chronicle E 1066 Harold se Norrena cyng, where Chronicles C and D have 1066 Harold cyning of Norwegan.

[^81]:    ${ }^{6}$ One could argue, of course, that when the 'antecedent' appears in the preceding entry or chapter it is no longer in the same anchoring domain as the 'anaphor'. However, there is often a continuation of the same subject matter from one entry (or chapter) to the next (see Sielanko-Byford 2013: 158-159).

[^82]:    7 The examples from Bede are cited by Short Title, which includes Book number (e.g. Bede1), chapter, page, and line number following the edition (Miller 1890-98).
    8 In all the examples, the trigger and the anaphor appear in bold type.

