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REVISITING
AGREEMENT PARADIGMS:
PREDICATIVE ADJECTIVES
IN DANISH

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List of abbreviations

ACC - Accusative

AUX – Auxiliary

C – Common gender

CL - Clitic

DAT – Dative

DEF - Definite

ERG – Ergative

F- Feminine

M - Masculine

N - Neuter

NOM – Nominative

OBL - Oblique

PST – Past tense

PSTPRT – Past participle

SG - Singular

UNERG – Unergative

Abstract

Theories of agreement draw on a variety of linguistic aspects within the realms of syntax, semantics and pragmatics. This dissertation focuses on a paradoxical pattern attested in colloquial Danish, involving adjectival subject complements that may optionally agree in number with their prepositional objects. Previous derivation-based and constraint-based approaches to agreement are examined in relation to this phenomenon, and in this connection a number of problematic issues in Baker's (2006) unified theory of agreement are identified. This dissertation offers an alternative account, claiming that the relation of topic may affect overt agreement, ostensibly as a consequence of rendering contextualisation efficient and thus facilitating discourse. In addition, the syntactic realisation of the relevant construction is argued to be two-fold, mirroring the optional agreement pattern: In the standard case of the predicative adjective agreeing with the subject, the latter is base-generated in the Specifier of the adjectival phrase, whereas the object is base-generated here when – due to its status as topic - it partakes in an overt agreement relation with the adjectival subject complement. The agreement phenomenon thus exists independently of Case-assignment, as it appears that the adjectival subject complement may overtly agree with the pragmatic function of topic, rather than the syntactic relation of subject.

1. INTRODUCTION

Syntax studies sentences, or more explicitly the stage between words and their meaning in utterances. Chomsky (1981, 1982) assumes three essential levels of linguistic representation, namely DS (Deep Structure), SS (Surface Structure) and LF (Logical Form). According to transformational grammar, the derivation of a sentence is the mapping of structures from one level of representation to another. A sentence at DS is created by input from the lexicon which is structured into trees that obey X-Bar Theory. Each node in the tree has a category label and a terminal string of a lexical item. Syntax then transforms the sentence from DS to SS according to language-specific rules. This sentence structure is then subject to PF (Phonological Form) and LF. Predication relationships, such as the one which will be examined in this dissertation, adhere to the rules of interpretation which belong to the component of grammar called LF. However, there has been a great deal of discussion in the literature on syntax whether or not LF operates off DS or SS, if not both (cf. Napoli, 1993: 271-273). According to Julien (2007: 1-2), “the atoms of syntax are morphemes, not entire words” and therefore “transformations operating on these atoms can have both morphological and syntactic effects”. However, she claims that “there is one inflectional category that does not fit into the relatively rigid framework that the syntactic approach provides” (cf. Julien, 2007: 18), namely *agreement*. Based on variation in the positioning of agreement markers cross-linguistically (see Julien, 2002, for further analysis), Julien (2007: 19) argues that “agreement markers, unlike markers of other categories, do not in themselves represent syntactic heads. Instead, agreement features are added to heads that also have some other content”. This idea is echoed by Sigurðsson (2004: 66) who argues that “the basic syntactico-semantic structure of language, LF” does not contain “complex agreement or inflectional elements”. The fundamental question raised by these statements is how dependent agreement marking really is on syntactic relations and operations.

This dissertation will examine an unusual agreement paradigm in predicative adjective constructions attested in colloquial Danish which, to the best of my knowledge, has never before been discussed or analysed in the literature on Danish grammar, possibly because of the fact that the agreement pattern is non-standard: The adjectival subject complement may agree in number with an object that is overtly marked as carrying accusative Case. The focus will be on trying to account for *how* and *why* this paradoxical phenomenon comes to be by drawing on syntactic (cf. e.g. Belletti (1998, 2001), Baker (2006)), semantic (cf. Dowty and Jacobsen (1988)) and pragmatic (cf. Pollard and Sag (1994)) theories of agreement. The question is whether the abnormality under consideration is due to a phonological phenomenon (a widespread difference between the plural and singular forms is presence versus absence of the Danish "stød"), a syntactico-morphological interconnection (finite verbs in Danish are not overtly marked for person, gender or number),

syntactic movement (left dislocation is prevalent in the instances where the agreement mismatch is possible), or a semantico-pragmatic relation between the arguments in the relevant structures (the object might interfere with the status of the subject in this construction). Indeed, the observable facts might be explained by several or all of the above.

In section 2, the phenomenon of predicative adjectival agreement in Danish is examined, and in sections 3.1 and 3.2, syntactic analyses that could potentially account for the Danish are presented, which is followed by a semantico-pragmatic approach to the Danish agreement paradox in section 3.3. The subsequent section focuses on residual issues, such as overt gender agreement on the predicative adjective and the question of the status of the predicative adjective as conceivably falling under the category of ergativity.

2. THE PHENOMENON

2.1. The nature of predicative adjectives

Traditional grammar typically defines the clause in terms of a predication relation between a subject and the property predicated of the subject, namely the predicate (e.g. Jespersen (1924)). A predicative adjective can be described as forming the basic lexical information of the clause in which it occurs. Predicative adjective constructions are characterised by a structure involving an adjective – which may take one or more arguments - in a post-copular position. The copula in this type of construction does not seem to carry any meaning, aside from identifying the subject and ascribing a property to it. It is commonly assumed that adjectives cannot serve as hosts for tense in the majority of languages belonging to the Indo-European language family tribe. According to DeArmond (2004), the basic predicative adjective construction in English, exemplified by *John is fond of chocolate*, can be accounted for as follows:

“Since there is no host for tense, Tense cannot lower. By Last Resort, a dummy (auxiliary) verb must be inserted to function as host for Tense. The morpheme {BE} is inserted and adjoined to the left of Tense. The noun JOHN needs Case. It raises and is adjoined to TP. The features of the subject are copied to the first verb, the auxiliary verb. In the second pass to the lexicon, {BE}, [-Past, -Pers, -Pl] is spelled out as “is”.

As the only other category besides verbs, prepositions can take an object, but as is the case in the predicative adjective construction, adjectives can take (generally optional) PP complements. The root of the adjective describes properties of the entity which the adjective as such modifies. Morphological affixes may signal agreement, but agreement features are instantiated even in the languages where they are abstract and have no morphological reflex. Let us now take a look at how this type of agreement manifests itself in Danish.

2.2 The basic data in Danish

Danish is a Germanic language with Verb Second and the unmarked word-order is SVO. In Danish, adjectives may agree in gender, number and definiteness with an NP. The copular *være* (“be”), which inflects as *er* in all persons, numbers and genders in the present tense, relates the subject complement to the subject, e.g. *Vi er studerende* (“We are students”). There is thus no overt agreement on the verb in Danish.¹

Danish displays overt agreement in the *phi*-features number and gender on adjectival subject and object complements with the argument which they modify. However, in colloquial Danish there is optional agreement between the predicative adjective and the object or the subject, particularly in certain syntactic configurations. The subject and object in these cases have overt number morphology, and it is this *phi*-feature that may reveal an unexpected agreement relation. The predicative adjective can thus agree with an NP that it apparently does not modify. The core of the conundrum is the following: In Danish, prescriptively grammatical sentences involving a direct object and an adjectival subject complement look as follows:

- (1a) Dem er jeg vild med
Them-ACC.PL am-AUX I-NOM.SG crazy-SG about
“I am a fan of them”
- (1b) Bøgerne er jeg vild med
Books-DEF-PL am-AUX I-NOM.SG crazy-SG about
“I am a fan of the books”
- (1c) Jeg er vild med bøgerne
I-NOM.SG am-AUX crazy-SG about books-DEF.PL
“I am a fan of the books”

Nonetheless, Danes utilize the following forms interchangeably in colloquial speech, although they ought to be completely ungrammatical, given the fact that the predicative adjective is a subject complement and it agrees in number with the prepositional object:

¹ Actually, the verb almost disappears (i.e. merges with the subject) in the pronunciation when a pronominal subject is in CP-Spec in predicate adjective constructions, maybe due to the weak semantics of the verb:

- (a) Jeg’ syg i dag
I ill to-day
“I am ill today”
- (b) Vi’ interesserede i købet
We interested in purchase-DEF
“We are interested in the purchase”

- (2a) Dem er jeg vilde med
Them-ACC am I-NOM crazy-PL about
“I am a fan of them”
- (2b) Bøgerne er jeg vilde med
Books-DEF am I-NOM crazy-PL about
“I am a fan of the books”
- (2c) Den er vi vild med
It are we-NOM crazy-SG about
“We are fans of it”
- (2d) Filmen er vi vild med
Film-DEF are we-NOM crazy-SG about
“We are fans of the movie”
- (2e) Bøgerne, som jeg er glade for, står på hylden
Books-DEF, which I-NOM am happy-PL about, are on shelf-DEF
“The books that I like are on the shelf”
- (2f) Hvilken bog er I glad for?
Which book are you-NOM.PL happy-SG for
“Which book do you like?”

In examples (2a) and (2c), the predicative adjectives agree with topicalised pronominal objects that are inflected with plural and singular number morphology, respectively. In examples (2b) and (2d), the topicalised objects are full NPs with plural and singular inflectional affixes, respectively. Relativisation of a plural object is found in example (2e) and in example (2f), a singular object undergoes *wh*-movement. These examples show that when the an object has moved to CP-Spec, lack of agreement between subject and adjectival subject complement, or maybe rather manifest agreement between object and adjectival subject complement, is grammatical.

The following may seem trivially obvious, but must be mentioned for the purpose of completeness: There is never a mismatch in number agreement when the subject and the object have the same number, which is obvious from the examples in (3), where the two arguments in question have identical number features, plural in (3a) and singular in (3b):

- (3a) Dem er vi vilde/*vild med
*Them-PL are we-PL crazy-PL/*crazy-SG about*
“We are fans of them”
- (3b) Den er jeg vild/*vilde med
*It-SG am I-SG crazy-SG/*crazy-PL about*
“I am a fan of it”

In addition, it is very telling that the unusual agreement paradigm does not occur in the same type of construction if there is no PP complement. Non-occurrence of agreement between the subject and the adjectival subject complement in these cases is at the extreme end of ungrammaticality:

- (4a) * De er vild
They-PL are crazy-SG
- (4b) * Jeg er glade
I-SG am happy-PL

The fact that the agreement mismatch pattern only appears when the subject and the object do not have the same number strongly suggests that the root of the phenomenon is the existence of an agreement relation between the predicative adjective and the object, rather than a lack of agreement between the adjectival subject complement and the subject (seeing as the predicative adjective cannot overtly agree with two different numbers, plural and singular).

The adjectives that are used as predicative adjectives in the examples in this section can also be employed as attributive adjectives, and in these cases the same phonological forms cannot manifest agreement mismatch with respect to definiteness, even though the indefinite noun, *en glad kone*, in example (5a) might theoretically agree in definiteness with the definite noun *banken*, given what we have seen in the examples above regarding number agreement:

- (5a) En glad/*glade kone er penge i banken
*A-INDEF happy-INDEF/*DEF wife is money in bank-DEF*
“A happy wife is money in the bank”
- (5b) Den glade/*glad kone ønsker ikke penge i banken
*The-DEF happy-DEF/*INDEF wife wishes not money in bank-DEF*
“The happy wife does not want money in the bank”
- (5c) Penge i banken er lig med en glad/*glade kone
*Money-INDEF in bank-DEF is equal to a happy-INDEF/*DEF wife*
“Money in the bank equals a happy wife”
- (5d) Banken giver penge til den glade/*glad kone
*Bank-DEF gives money to the happy-DEF/*INDEF wife*
“The bank is giving money to the happy wife”

This very strict agreement pattern with respect to definiteness involving the very same adjectives that were used in the predicative adjective construction being inflected in the exact same way for

number strongly suggests that the agreement mismatch in e.g. the examples in (2) is not caused by a phonological phenomenon, but that the cause must be found in the construction itself.²

There is yet another type of construction involving a subject, an object and an adjectival subject complement. Here, agreement between the grammatical subject (which is a raised object) and the predicative adjective is obligatory. What does this restriction tell us about the nature of the phenomenon? In (6a), the logical subject, *os* (“us”), functions as an indirect object and in (6b) as a prepositional object, and these examples should dispel the idea that the linearity of the sentence has an influence.

(6a) *Filmen syntes os lang/*lange*

Film-DEF seemed us long-SG/long-PL

“The film seemed long to us”

(6b) *Filmen syntes lang/*lange for os*

*Film-DEF seemed long-SG/*long-PL for us*

“The film seemed long to us”

The fact that the object functions as the grammatical subject may be the reason why there is no possibility of an agreement mismatch. Another example of lack of agreement mismatch between predicative adjective and the object which involves the movement of the object to the left periphery occurs with object complements in that they can only agree in number with the objects they modify:

(7a) *Ham gjorde de lykkelig/*lykkelige*

*Him made they happy-SG/*happy-PL*

“They made him happy”

(7b) *De gjorde ham lykkelig/*lykkelige*

*They made him happy-SG/*happy-PL*

“They made him happy”

In other words, the examples in (6) and (7) indicate that it is not the fact that the object is moved to the left periphery in itself that engenders agreement between the object and the predicative adjective. Let us now take a look at how one can analyse agreement, and initially the focus will be on how related phenomena have been accounted for in the literature.

² In fact, the phonetic difference between the plural and singular forms in the majority of examples presented here is presence versus absence of the Danish phonological phenomenon “stød”.

3. ANALYSES

3.1 Previous analyses of related phenomena

The Danish phenomenon recalls past participle agreement in French, in which language the main verb past participle displays overt agreement with respect to the *phi*-features gender and number with the subject or the object, depending in the syntactic construction in which it appears. The endings *-e* and *-s* in the French examples are orthographic markers of feminine and plural, respectively. The masculine form of the past participle is the default morphological ending for gender. When the auxiliary is *avoir*, the participle agrees with an object in case it moves to the left periphery, more specifically CP-Spec. The past participle does not display this type of agreement in case there is no such movement and the object stays in situ. Consider the following representative occurrences of the phenomenon:

- (8a) Les nouvelles qu'il a écrites se vendent très bien
The short stories that he has written-F.PL sell very well
“The short stories that he has written sell very well”
- (8b) Quelle nouvelle a-t-il écrite en France?
Which short story has he written-F.SG in France
“Which short story has he written in France?”
- (8c) Ces nouvelles, il les a écrites pendant dix ans
These short stories, he them has written-F.PL for ten years
“He has written these short stories for ten years”
- (8d) Les nouvelles ont été écrites par lui cet été
The short stories have been written-F.PL by him this summer
“The short stories were written by him this summer”
- (9a) Il a écrit deux nouvelles en Angleterre
He has written-M.SG two short stories in England
“He wrote two short stories in England”
- (9b) Elles ont changé pendant la Guerre
They-F.PL have changed-M.SG during the War
“They changed during the War”

In example (8a), the object undergoes relativisation, in (8b) a *wh*-object is subject to question formation, in (8c) the direct object is extraposed and cliticised. Example (8d) shows the object having undergone passivisation. The examples in (9), on the other hand, show constructions involving unmarked word-order, and demonstrate that there is no agreement between the past participle and the object in this syntactic structure, SVO word order. Kayne (1989) argues that the

fact that past participles in French may manifest overt agreement in number and gender in examples of the various types in (8) is the result of an agreement relation between the past participles and the moved NPs or clitics (cf. Belletti, 1998: 11). The difference between the Danish phenomenon and this type of construction in French is, apart from the fact that the elements manifesting agreement vary, that agreement in the latter between object and predicative adjective is typically obligatory, whereas it is optional in colloquial Danish.

3.1.1. Splitting the functional projection Infl

According to Chomsky in *Lectures on Government and Binding* (1981), “the subject-predicate relation is systematically mediated by a functional node labelled Infl(ection), assumed to contain grammatical information normally associated with the verb, such as, typically, tense, mood, agreement features/affixes” (Belletti, 1998: 2). However, Chomsky (1991, 1993) later argued that the Infl node should be split into AgrS (for subject agreement, corresponding to IP in older systems), T (for tense) and AgrO (for object agreement). A number of theorists have adopted this system (including Belletti (1998) and (2001)).

Chomsky, however, subsequently (1995: 349ff) offered *The Minimalist Program* where he argues against the hypothesis of agreement projections as individual syntactic positions. He dismissed the idea of Agr nodes in the functional clause structure on the basis of the theoretical standpoint that their feature content is considered “uninterpretable” because it conveys a morpho-syntactic relation. The *phi*-features are not part of LF, since they disappear after the Spec-Head agreement checking operation. In the words of Belletti (1998: 29):

“According to Chomsky’s proposal, [-interpretable] ϕ features of the Agr type should not justify a particular syntactic position as they are not present in LF. They are consequently assumed to be directly part of the composition of other categories (T for AgrS and V for AgrO)”.

In his subsequent work, Chomsky (e.g. 2001) assumes that the IP-clause consists of the clausal functional heads T and *v*, the former projecting a TP dominating *v*P, a predication or aspect phrase.

3.1.2. Belletti’s (1998, 2001) account of past participle agreement in French and Italian

Belletti (1998: 29-30) points out that Chomsky’s (1995) theory requires the stipulation that there can be multiple Specifier positions in the remaining projections if the Spec-Head agreement relation is to be obtained and the checking of *phi*-features achieved. Instead, she opts for an alternative means of accounting for agreement phenomena.

According to Belletti (2001: 2), the Agr nodes and their projections “constitute a kind of ‘bridge’ between the purely lexical content of verbs and the nominal content of the arguments; they are the

reflection of nominal features in the verbal morphology”. She thus assumes AgrSP and AgrOP of Chomsky (1991, 1993) and maintains that the Agr heads are a collection of *phi*-features. Belletti (1998: 9) describes the agreement process as a Spec-Head relation in the following terms: “Much as nominative Case is checked in Spec/AgrS of finite tensed clauses under the “agreement” relation, so accusative is checked in Spec/AgrO of clauses containing a transitive verb.” Belletti (1998: 11) assumes an additional Agr projection, namely one labelled “AgrPstPrTP”, resulting in a five-layered system consisting of an AgrSP, TP, AgrOP, AuxP, AgrPstPrTP, corresponding to the traditional IP. The common denominator between the three agreement projections in Belletti’s (1998) account is that they carry *phi*-features that “undergo (morphological) checking with a noun phrase filling the Spec of the relevant Agr projection, in syntax or LF” (Belletti, 1998: 12). According to Belletti (1998: 11), “[t]he natural assumption to make is that an Agr projection is among the functional projections which surround the past participle and that the moved constituent triggers agreement in its passing through it Spec.” Thus, according to Belletti (2001: 2), past participle agreement in the following example from Italian is the result of the left dislocation of the NP (example adopted from Belletti (2001: 2):

- (10) L’ ho conosciuta ieri
Her-CL have known-F.SG yesterday
“I have known her yesterday”

In French, past participle agreement is generally not obligatory in constructions involving *wh*-movement. Belletti (2001: 7) argues that the “[o]ccurrence vs. non-occurrence of past participle agreement could in fact be a sign of different types of derivations: one involving passage through the Spec of the past participle projection, one not involving it”. Is it possible to apply this account to the Danish agreement phenomenon, which – as mentioned above – is also subject to optionality?

3.2. A discussion of the syntactic approach to the Danish phenomenon

In the case of Danish agreement between the object and the subject complement, one might - on the basis of Belletti’s (1998, 2001) analysis above – assume that the abnormal agreement pattern is obtained through a Spec-Head relation in a relevant low Agr projection related to the subject complement-predicative adjective morphology, which could be termed “AgrPredP” in the spirit of Belletti (1998, 2001). In the cases of prepositional objects having undergone movement to the left periphery and agreeing with the adjectival subject complement, the relation would thus be established as the object passes through the Specifier of the AgrPredP, checking its *phi*-features in a Spec-Head agreement relation, in the course of its movement to the final landing site, CP-Spec (see section 3.3.4 for a further discussion of the structure of the left periphery in Danish). However, as

will become apparent below, the Danish phenomenon rejects the introduction of a separate Agr projection. This is due to the fact that the agreement pattern – unexpectedly - also shows up in canonical, unmarked SVO word-order:

- (11a) Jeg er vilde med dem
I am crazy-PL about them
“I am a fan of them”
- (11b) Vi er glad for bøgerne
We are happy for books-DEF
“We like the books”

The derivation-based approach to the past participle agreement phenomena in Italian and French is thus not pertinent to the Danish phenomenon of agreement between an object and an adjectival subject complement, even though the latter also emerges in constructions involving movement to the CP-Spec. In other words, Belletti’s (1998) assumption that there is an Agr projection, through whose Specifier the moved object passes, triggering agreement, seems highly questionable when dealing with the Danish data. There is, however, a case of past participle agreement with an object in situ “in some dialectal varieties of (southern) Italian, [...] other Romance languages (e.g. Occitan), and in a somewhat more literary Italian” (Belletti, 2001: 10), which Belletti attempts to apply this theory to. Consider the following example from Belletti (2001: 10):

- (12) Maria ha conosciute le ragazze
Maria has known-F-PL the girls-F.PL

In order to explain this type of phenomenon, Kayne (1989) adopts two stipulations, namely that the object in the relevant construction is in the right dislocated position and that there is a silent clitic which triggers the agreement (cf. Belletti, 2001: 10-11). This explanation does not seem satisfactory given the existence of the Danish data, because Danish does not right-dislocate objects, nor employ cliticisation. It would thus seem that Kayne’s (1989) stipulations become obsolete if one seeks a unified account of the agreement data in Italian, French and Danish. In other words, it seems that the explanation for this unusual agreement pattern in Danish cannot be found in this movement analysis.

3.2.1. The Probe-Goal Approach

As alluded to in section 3.1.1, Chomsky (2001: 3) defines the relation Agree as one “holding between α and β , where α has interpretable inflectional features and β has un-interpretable ones,

which delete under Agree”. In the standard case of the relation predicate-argument, the subject has interpretable features and the finite verb, merely repeating the number information of the subject and not contributing anything to the semantics, has uninterpretable ones. The number feature of the verb can thus be deleted prior to (i.e. it is invisible at) LF, but is visible at PF. This process is referred to as “neutralization” (cf. Sigurðsson, 2004: 61). The underlying relation is called Agree, and the finite verb is referred to as a probe and it searches for a goal with matching features (here, the subject) and when it does, “Agree is established and the un-interpretable features of the probe are deleted for the purpose of successful interpretation” (Sigurðsson (2004: 61).

Verbs agree with their subjects and objects in person, number and gender, but adjectives only agree in number and gender. Verbs and adjectives are traditionally treated as two distinct phenomena, which is also reflected in the fact that agreeing adjectives are often referred to as instances of concord and agreeing verbs as instances of agreement (cf. Baker, *The Syntax of Agreement and Concord* (2006)). The concrete morphological aspect of agreement, of course, is not part of Universal Grammar, but the underlying syntactic relations might be. An approach which tries to capture cross-linguistic properties of agreement is presented by Baker (2006), who argues that agreement with respect to *phi*-features is subject to the following conditions (directly adopted from Baker (2006: 1):

(13) “F agrees with XP only if:

- a. F c-commands XP or XP c-commands F (the c-command condition)
- b. There is no YP such that YP comes between XP and F and YP has phi-features (the intervention condition)
- c. F and XP are contained in all the same phases (the phase condition)
- d. XP is made active for agreement by having an unchecked Case feature (the activity condition)”

However, the Danish phenomenon does not adhere to the intervention condition. The object with which the predicative adjective agrees does not intervene. In fact, the subject intervenes in all examples involving movement of the object to the left periphery, as seen in (2), and should thus prevent the agreement relation between the object and the predicative adjective from taking place. Baker’s (2006: 2) main claim is that “a potentially agreeing head can either probe upward or downward to find an NP with phi-features to agree with”. According to him, this assumption is required in order to account for the fact that a predicative adjective can agree with the subject of predication, because the c-command condition would rule this type of agreement out, given the assumption that the base-generation of the subject in the Specifier of the PredP precludes it from appearing inside the c-command domain of the predicative adjective (Baker, 2006: 2). Given

Baker's c-command condition in (13a), "adjectival heads should in principle be able to probe downward for something to agree with" (Baker (2006: 2)). The agreement paradox in Danish both supports and contradicts Baker's theory in this respect. His hypothesis arguing that predicative adjectives should be able to probe both downwards and upwards is mirrored in the optional agreement between the predicative adjective and object: In the case where it agrees with the subject (such as in example (1a)), it probes upward, and when it agrees with the object (such as in example (2a)), it probes downward. However, following Baker (2006: 7), the kind of optionality found in the Danish agreement mismatch should not exist because of Case theory. This assumption is based partially on the following example, involving a thematic subject and an NP complement (adopted from Baker (2006: 7)):

- (15) Gianni è certo di questo
Gianni is certain of this

In this case, as argued by Baker (2006: 7), agreement with the internal argument of the predicative adjective, *certo*, is blocked because it "appears inside a PP headed by *de*, and we know that agreement never looks inside PPs by the activity condition" (Baker, 2006: 7). He claims that since adjectives do not check/assign structural Case, the preposition is inserted to license Case on the internal argument of the predicative adjective and this "prevents the adjective (and the finite auxiliary) from agreeing with the internal argument" (Baker, 2006: 7). However, as the examples in (2) clearly demonstrate, the predicative adjective may indeed agree with an object whose Case is assigned by a preposition. Thus, both the intervention condition and the activity condition of Baker (2006) are violated by the agreement mismatch phenomenon in Danish. The conditions in (13) are thus too specific to account for agreement relations cross-linguistically.³

3.3. Towards a semantico-pragmatic account of predicative adjectival agreement in Danish

The failure of the syntactic theories above to account for the Danish agreement mismatch phenomenon suggests that we need to look elsewhere for a way to explain the fact that an adjectival subject complement taking a PP as its argument may agree with the PP object in number.

³ Kayne's (1983) claim that PP-structures are incompatible with *phi*-features, and thus in theory prevent agreement relations, also becomes questionable on the basis of the Danish agreement paradox. Similarly, Hestvik (1991) argues that PPs are subjectless binding domains.

Semanticists and pragmatists have also offered accounts of agreement phenomena: According to Dowty and Jacobsen (1988)⁴, agreement patterns result from the compatibility of conditions on denotation, and Pollard and Sag (1994: 67-68) propose an account of agreement where the features person, number and gender “are not specified as part of syntactic categories at all, but rather belong to the internal structure of referential indices”. They thus argue that “agreement features serve the practical purpose of helping conversants to keep referential indices distinct from each other by encoding contextually relevant properties of the entities or sets that they are anchored to” (Pollard and Sag (1994: 67-68)).⁵ In what follows, I will pick up this thread and suggest that the Danish phenomenon is the result of semantico-pragmatic relations. My main claim is that the agreement pattern is only possible when the PP complement functions as a topic in the information structure.

3.3.1. Topicalisation

Unlike English, Danish can freely topicalise pronouns independently of which Case they are assigned. In example (15a) and (15b), the topicalised objects are marked with accusative Case and in example (15c), the topicalised object is dative:

- (15a) Ham kan jeg godt lide
Him can I well like
”I like him well”
- (15b) Dem så vi ikke før i går
Them saw we not before yesterday
“We did not see them before yesterday”
- (15c) Hende gav jeg blomsterne
Her gave I flowers-DEF
“I gave her the flowers”

However, topicalisation is not restricted to pronominal objects. Full object NPs may also occur at the left periphery. Erteschik-Shir (2006) gives an account of the constraints at the base of this phenomenon. She assumes that topic and focus are part of lexical selection. She views them as “features which are optionally assigned to lexical items”, and not as “heads that project their own phrases” (Erteschik-Shir, 2006: 1). Being supersegmental, topic and focus cannot be introduced

⁴ The view of several semanticists, such as Dowty and Jacobsen (1988), is that number agreement is a reflection of the semantics of a sentence in the sense that, for instance, the number of the actor in an event is equivalent to the number on the predicate.

⁵ Pollard and Sag (1994: 97) further hypothesize that predicative adjectives show semantic agreement, whereas finite verbs manifest grammatical agreement.

lexically, because that would violate Chomsky's (1995) condition of Inclusiveness, as they would be "added as annotation in the derivation" (Erteschik-Shir, 2006: 1).

As pointed out by Erteschik-Shir (2006: 7), topicalisation in Danish is an instance of optional dislocation (as context may also identify topics) and it is "constrained by the requirement that overt morphology (e.g. agreement, case) enable disambiguation". Erteschik-Shir (2006: 7) argues that topicalisation is a PF operation, subject to a post-Spell-Out constraint, as "morphology is not visible in syntax", namely the following (adopted from Erteschik-Shir, 2006: 8):

(16) "ID: In a string X₁Y₁, ID X as subject and Y as object if neither is marked otherwise".

Thus, according to Erteschik-Shir (2006: 8), "[d]islocation to the left periphery in Danish is restricted to constituents which qualify as topics and must result in an unambiguous parse". The constraint in (16) should apply cross-linguistically (though to varying degrees of rigidity)⁶ and it suggests that "overt agreement identifies displaced DPs" (Erteschik-Shir, 2006: 9).

In the SVO word-order structures that we saw in the examples in (11), the prepositional object functions as a topic, and it seems that this pragmatic relation must obtain in order for agreement to arise between predicative adjective and object, because when the object does not qualify as topic, this type of agreement becomes entirely ungrammatical:

- (17a) Jeg er vild med bøger
I am crazy-SG about books
"I am a fan of books"
- (17b) *Jeg er vilde med bøger
I am crazy-PL about books
"I am a fan of books"

The constraint in (16) should ensure that when neither the subject nor the object is overtly marked with Case, no disambiguation is able to take place and the resulting sentence should be ungrammatical. However, as should be apparent from the examples in (18), the predicative adjective construction in question would appear to be an exception. As long as the prepositional object functions as a topic (in the sense that it has been established as a discourse referent), overt Case-marking on one or both of the arguments in the structure involving dislocation is not obligatory. Moreover, the agreement mismatch between object and predicative adjective obtains:

⁶ According to Erteschik-Shir (2006: 9), [t]he SVO reading of an ambiguous string is strongly preferred and contextual clues can only overrule this interpretation with difficulty".

- (18a) Bøgerne er Susanne vild/vilde med
Books-DEF are Susanne crazy-SG/crazy-PL about
“Susanne is a fan of the books”
- (18b) Bøger er Susanne *vild/*vilde med
*Books are Susanne *crazy-SG/*crazy-PL about*
“Susanne is a fan of books”

In other words, when the object is definite, the context (and/or stress patterns) determines whether or not the information introduced by the object is old or new, and therefore also whether agreement between object and predicative adjective may occur. In (19a), the definite noun is in contrastive focus (manifested by capital letters, suggesting stress), whereas it functions as topic in (19b):

- (19a) *Nej, jeg er vilde med BØGERNE
No, I am crazy-PL about BOOKS-DEF
“No, I am a fan of the books”
- (19b) Jeg er VILDE med bøgerne
I am CRAZY-PL about books-DEF
“I am a fan of the books”

The agreement phenomenon is most common with pronouns and/or topicalisation (or other instances of movement of topic elements to the left periphery. This is anticipated by Lambrecht (1994: 176), who argues the following:

“The view of unaccented pronominals as the cognitively preferred topic expressions makes it possible to interpret a number of crosslinguistically widely attested grammatical construction types as pragmatically motivated structural devices whose basic function is to promote referents of the Topic Acceptability Scale from non-active (i.e. brandnew, unused, or accessible) to active state in the discourse and hence from lexical to unaccented pronominal coding in the sentence.”

Another telling fact is that when the topicalized direct object refers to an actual entity, agreement with the subject complement is more grammatical than when it does not.⁷ In example (20a), *det* (“it”) picks up a referent that is established in the previous discourse, i.e. a topic at sentence level, whereas the degradation of grammaticality in example (20b) is the result of the fact that *det* does not make reference to a discourse referent:

⁷ Vikner (1995: 167) argues that elements, such as the one in the subject position in example (20b), are arguments (as opposed to quasi-arguments) in Danish, as it is assigned a thematic role.

(20a) (*Speaker 1: Hvad synes I om jeres nye hus?*)

Speaker 2: Det er vi glad for

It are we happy-SG about

“We are happy about that”

(20b) (*Speaker 1: The sun will be shining on your wedding day*)

Speaker 2: ?? Det er vi glad for

It are we happy about

“We are happy about that”

It is interesting that the unusual agreement pattern is not prevalent in cases where the subject is the impersonal pronoun *det* (“it”/“that”), where it does not refer to a specific entity whose *phi*-features (number, gender, person) are known in the sense of *hus* (“house”), but instead makes reference to a circumstance or the proposition of the preceding sentence in the discourse, which is why it may be argued that it does not function as a topic.

3.3.2. Other types of movement to the left periphery

With respect to relativisation, the movement of the direct object to the left periphery results in optionality as regards which argument the adjectival subject complement may agree with in number. Again, this supports my claim that the agreement phenomenon in Danish is a result of the fact that the object offers given information:

(21a) Bøgerne som jeg er vild/vilde med står på hylden

Books-DEF that I am crazy-SG/crazy-PL about, stand on shelf-DEF

“The books that I am a big fan of are on the shelf”

(21b) Bogen som de er vilde/vild med står på hylden

Book-DEF that they are crazy-PL/crazy-SG about stand on shelf-DEF

“The book that they are fans of is on the shelf”

A-bar movement involving question formation also allows the adjectival subject complement to agree with the object, rather than the subject. Interestingly, the interpretive effects of the following phenomenon in French are also true of the same type of construction involving predicative adjectival agreement in Danish. It was first discovered for French by Obenbauer (1992, 1994), and looks as follows (examples from Belletti (2001: 17):

- (22a) Combien de fautes a-t-elle faites?
How-many of mistakes has she made-F.PL
“How many mistakes has she made?”
- (22b) Combien de fautes a-t-elle fait?
How-many of mistakes has she made-M-SG
“How many mistakes has she made?”

The point is that in example (22a), “a set of specific typical mistakes is presupposed, while there is no such presupposition in the non-agreeing case, at least not necessarily” (Belletti, 2001: 17). The same difference exists in the Danish agreement phenomenon, where the object agreeing case in (23a) presupposes a number of books of which the person asked is a fan, which is not necessarily the case in the (23b) example:

- (23a) Hvor mange bøger er du vilde med?
How many books are you crazy-PL about?
“How many books are you a fan of?”
- (23b) Hvor mange bøger er du vild med?
How many books are you crazy-SG about?
“How many books are you a fan of?”

In view of the facts outlined above, the explanation of the Danish data might be that *bøger* (“books”) in example (23a) functions as topic in the sense that it does not introduce new information as such, whereas the noun could be a focus element in the example in (23b) by introducing new information. This way of explaining the difference in interpretation embraces my claim that the agreement phenomenon in Danish theoretically speaking could be the result of pragmatic relations. Let us now turn to an example of pragmatic factors influencing agreement in Case-marking in Middle Danish.

3.3.3. The cohesive case system in Middle Danish

Traditionally, Case is a means of manifesting semantic roles and the grammatical relations between, for instance, a preposition and the nominal which it takes as its complement. These relations are often mediated through overt agreement markers, as we have seen. However, Skaftø Jensen (2003: 225) talks of a *cohesive case system* in Middle Danish which “concerns the use of grammatical means in order to create cohesive text”. In this system, “the distribution of the different cases is to some extent a matter of choice which is left up to the speaker” (Skaftø Jensen (2003: 225). She has examined old texts in Middle Danish, such as the *Scanic Law*, and the general pattern that she found here was that arguments belonging to the foreground information received

nominative Case in Middle Danish, whereas those that could be perceived as constituting the background information of the discourse would receive oblique case, even if they were grammatical subjects (for a further discussion of the Middle Danish data, see Skaftø Jensen (2003: 221-236)). In the following example, the noun *kuna* (“wife”) has, according to Skaftø Jensen (2003: 229), been established as discourse referent in the text. It therefore constitutes background information and can receive oblique case (example adopted from Skaftø Jensen (2003: 229):

- (24) Ær kunu san-Ø fore hordoms sac (...)
Is woman-F-OBL true-F.NOM for adultery’s sake (...)
“If a woman is found guilty of adultery” (...)

Thus, the cohesive case system in Middle Danish was a tool in the organisation of the information structure of sentences. What this discovery shows is that nominative Case is not necessarily the same as the grammatical function “subject” and the same goes for accusative Case and “object”. In addition, and more to the point in the present context, the analysis of the data gives us an idea of how pragmatic factors might affect the surface structure of a sentence.

3.3.3.4. The “Fundamentfelt” in Modern Danish

In Modern Danish, however, “the subject often consists of background information” (Skaftø Jensen, 2003: 232), which is a crosslinguistic tendency, as expressed by Blake (1994: 205). In traditional grammar, topics were even viewed as being equivalent to subjects (cf. Lambrecht, 1994: 199). According to Tøgeby (2003: 157) Danish is characterized by having a tendency for topics to be the information in the *Fundamentfelt* (roughly translatable to “Foundation Field”, this terminology is an allusion to the fact that this position in the syntactic structure typically serves a predominant role in the construction of sentences in Danish) and/or the subject.⁸ The subject as topic is thus sentence-first, and serves the identification of discourse referents and signalling the topic thus has a pragmatic function.

The *Fundamentfelt* is equivalent to CP-Spec. Given the fact that Danish is a Verb Second-language, the verb moves to C⁰ and the subject to CP-Spec in complementiser-free sentences (cf. Vikner, 1995: 42). Contrary to for instance English, where topicalisation does not lead to the subject appearing at the right side of the finite verb, this is exactly what happens in Danish in the case of topicalisation. These facts of Danish syntax set the stage for the object in the relevant cases examined in this dissertation to be perceived as the subject. Since topicalisation in Danish is movement to CP-Spec, the position otherwise occupied by the subject, the object might be treated

⁸ Prototypically, in Danish, the topic comes first and focus last (cf. Tøgeby (2003: 157)).

as the subject since it is also an argument and carries *phi*-features. Lambrecht (1994: 199) argues that “[i]t has often been claimed that there is a universal principle, or at least a strong crosslinguistic tendency, for topic expressions to be the first constituents in a sentence”.

The elements in the comment of a sentence introduce new information into the discourse, in contrast to topics. The data from Danish presented here suggest that agreement may be sensitive to the pragmatic relation of topic. The subject in Danish is usually a topic, and it is highly significant that the predicative adjective has a tendency in colloquial Danish to agree with a topic element. In examples where the predicative adjective agrees in number with the object, the latter functions as topic in the information structure of the sentence, which suggests that it agrees with the pragmatic relation of topic rather than the syntactic relation of subject.

4. RESIDUAL ISSUES

4.1. Gender agreement morphology on predicative adjectives in Danish

There is another type of agreement on the predicative adjective in Danish, namely one involving gender, which - for the sake of completeness – is included in the description of the phenomenon here. As illustrated above, adjectival subject complements agree in number with the subjects that they “describe” according to traditional prescriptive Danish grammar. However, they also agree in gender, overtly in the case of singular nouns⁹, as illustrated in the following examples:

- (25a) Vinduet er gammelt/*gammel
*Window-DEF is old-N.SG/*old-C.SG*
“The window is old”
- (25b) Mosen er skummel/*skummelt
*Marsh-DEF is misty-C.SG/*misty-N.SG*
“The marsh is misty”

Nonetheless, “errors” are made in colloquial Danish (predominantly in the North of Jutland) with respect to particular syntactic constructions involving expletive subjects and adjectival subject complements that do not take a PP, as in (26a) and (26b), where the adjectival subject complement does not agree in gender with the expletive subject. However, in this case the gender agreement pattern does not work both ways, as seen by the ungrammaticality of (26c).

- (26a) Det er utrolig at man stadig man se månen
It is incredible-C.SG that one can still see moon-DEF

⁹ As pointed out by Holmberg (2002: 86), gender is neutralised in plural in Mainland Scandinavian languages.

- (26b) At sidde og drikke øl om formiddagen, (det) er for dårlig
To sit and drink beer before noon, (that) is too bad-C.SG
- (26c) *Arbejdsprocessen var ubegribeligt
Work process-DEF was incomprehensible-N.SG

However, the fact that the lack of agreement does not apply bilaterally offers a strong indication that the root of the agreement pattern might be a phonological tendency in Danish to eliminate (or weaken) sentence-final voiceless stops when they follow voiced phonemes.¹⁰ In addition, there is no object with which the adjectival subject complement may agree, all of which makes these observable facts less interesting viewed from a syntactic standpoint.

4.2. Agreement and Case-marking

Agreement and Case-marking are often linked to grammatical relations, for instance by referring to the subject as agreeing with the finite verb and receiving nominative case. The Danish phenomenon clearly suggests that the morphological agreement markers on the predicative adjective may disregard Case and grammatical function (most obviously in examples with pronominal arguments, such as (2a,c), (11a), (15a-c)). This recalls Baker's "Parameter of Agreement" (2006: 2):

- (27) The Case-Dependency of Agreement Parameter: F agrees with DP/NP only if F values the Case feature of DP/NP or vice versa

Examining predicative adjective structures, Andrews (1982: 446) argues that the fact that the copula verb does not predicate anything of the subject indicates that the finite verb in structures such as those found in (1) and (2) should not be analysed as taking the subject as its argument. These considerations raise a number of questions regarding the character of the adjective, which we will now explore.

¹⁰ This conclusion is also supported by the fact that a number of adjectives that used to have inflectional Neuter suffixes are now only grammatical without these overt morphological affixes. The example in (a) is a quote from a 1901 novel by the Nobel prize winner of 1944, Johannes V. Jensen, *Kongens Fald* (i.e. *The Fall of the King*) (1901: 21), where the predicate adjective is inflected with Neuter. Example (b) is from contemporary Danish and indicates that Neuter inflection on this predicate adjective is now ungrammatical. The examples in (26) may thus be yet another expression of an overall tendency in Danish predicate adjectives regarding gender agreement which might end in the complete disappearance of overt morphological agreement with respect to this *phi*-feature on predicative adjectives:

- (a) "Kunde der ske noget i Dag, var det værdt at staa op (...)"
Could there happen something today, was it worth-T.SG to stand up (...)
"If something was to happen today, it would be worth getting up"
- (b) Det var værd/*værdt at rejse til Kina for at se kejseren.
*It was worth-C.SG/*T-SG to travel to China for to see emperor-DEF*
"It was worth it, travelling to China in order to meet the emperor"

4.2.1. The verbal character of predicative adjectives

The predicative adjective constructions in Danish (such as *være vild med*, “be crazy about”) can be rephrased as *lide* (“like”), suggesting its verbal character in that its function actually parallels that of a verb. This idea is also supported by the fact that this type of agreement mismatch also occurs in non-standard (i.e. colloquial) instances where a preposition is actually inflected with an ending, namely *-e*.

- (28a) Vi er af-e med dem
We are off-PL with them
“We got rid of them”
- (28b) Jeg er af-e med dem
I am off-PL with them
“I got rid of them”
- (28c) Jeg er af/*af-e med den
*I am off-SG/*off-PL with it*
“I got rid of it”

This type of construction is an elliptical version of the syntactic structures in (29), containing a past participle. As the examples below demonstrate, there is no overt morphological reflex on the verb determining which number the subject carries:

- (29a) Vi er kommet af med dem
We are come-PSTPRT off with them
“We got rid of them”
- (29b) Jeg er kommet af med dem/den
I am come-PSTPRT off with them/it
“I got rid of them/it”

The question now is why the preposition is inflected as a predicative adjective. The affix *-et* would be the expected morphological ending with verbs in this position functioning as a past participle, whereas the *-e* ending witnessed here suggests that the preposition *af* (“off”) functions as an adjectival subject complement. This hypothesis is confirmed by (28c), as the *-e* ending is ungrammatical with a singular object. As described above, an agreement mismatch does not occur when the subject and the object have the same *phi*-feature with respect to number.

According to Sigurðsson (2004: 89), Danish has adjectival agreement, but not participle agreement. This is also reflected in the fact that the past participle in (29a) does not have an *-ede* plural ending. However, it seems that Danish is undergoing a transition in this respect, which is apparent when we

look at predicative adjectives that may be perceived by speakers as having an intermediate status between predicative adjective and past participle in that they may show an agreement pattern expected of past participles, as in the example in (30b). In (30c), the object undergoes passivisation and the past participle does not agree with it in number. The logical subject is presented by the prepositional phrase, *af mig* (“by me”):

- (30a) Vi er rystede over byens tilstand
We are shaken-PL over city-DEF's state
“We are stunned by the state of the city”
- (30b) Politikerne er rystet over valgresultatet.
Politicians-DEF are shaken-SG over election result-DEF
“The politicians are stunned by the result of the election”
- (30c) Drinksene blev rystet af mig
Drinks-DEF were shaken-PSTPRT by me
“I shook the drinks”

A predicative adjective thus seems to have a role similar to that of the past participle in the constructions above. This relation is also mirrored in the fact that Chomsky (1981, 1986 and 1995) assumes that adjectives have the feature [+V]. Having the categorial feature [+N], as opposed to verbs which assign structural Case, (the heads of) adjectives should assign inherent Case. How can the agreement mismatch be motivated in the syntax?

4.2.2. Ergativity

Based on examples such as the ones below in (31), Belletti (2001: 12-13) argues that the adjectival phrase may involve “a different internal representation than the intransitive or transitive past participle” and instead be “closer to the one of past participle of unaccusatives which systematically manifest agreement” (examples adopted from Belletti, 2001: 12):

- (31a) Si è telefonato/*i
*One is called-M.SG/*M.PL*
- (31b) Si è felici/*e
*One is happy- M.PL/*M.SG*

This idea recalls the term of “ergativity” which covers instances where there is an equivalence between an object of a transitive verb and the subject of an intransitive verb, both referred to as “absolutive”, while the agent of a transitive is treated in a different way and named “ergative”.

4.2.2.1. Cinque's (1990) theory of ergative adjectives

In his (1990) article “Ergative Adjectives and the Lexicalist Hypothesis”, Cinque argues that “[t]he theory of grammar predicts that a class of ergative adjectives should exist alongside the established classes of ergative verbs” (cf. Burzio, 1986). This is due to the fact that X-bar Theory requires the phrasal categories to have the same internal structure and that the Lexicalist Hypothesis “demands that morphologically related verbs, nouns and adjectives be represented in the lexicon as single, categorically unspecified, entries endowed with certain unique θ -marking and sentential properties” (Cinque, 1990: 1). The logic of Cinque’s (1990) article is that it is expected that “an adjective morphologically related to an ergative verb would also be ergative, i.e. it should have its subject generated in object position, under A’, just as the subject of the corresponding ergative verb is generated in the structural object position, under V’.” (Cinque, 1990: 2)

Cinque (1990) thus argues that adjectives can be partitioned into ergative and unergative. However, since adjectives cannot assign structural Case, it would be beside the point to suggest that unaccusativity is a relevant term in this context. Cinque (1990) states that it is a possibility that “Italian has two distinct classes of adjectives, one that selects a subject argument underlyingly and the other that selects an object underlyingly” (cf. Baker (2006: 3). Is it possible to account for the Danish phenomenon on the basis of Cinque’s (1990) ergative/unergative distinction?

4.2.2.2. Bennis (2003)

Bennis (2003) lists a number of criteria that, according to him, should be met in order for a group of adjectives in Dutch to be classified as “ergative” in the sense of Cinque (1990). These criteria comprise - for instance - inversion and complementiser selection. Danish is similar to Dutch with respect to the fact that deviations from the canonical, unmarked word order is restricted to some extent, but inversion of subject and object is seen in connection with constructions involving movement to CP-Spec. However, as pointed out by Bennis (2003), another exception is constructions involving ergative verbs, where “the subject is an underlying direct object”, Bennis (2003: 7)) the direct object is allowed to precede the subject. The ergative verb *glæde* (“give joy”) is morphologically related to the adjectives *glad* and *glædelig* (“happy”):

- (32a) (at) besøget glædede mig
(that) visit-DEF happy-PST me
“(that) the visit made me happy”
- (32b) (at) mig glædede besøget
(that) me happy-PST visit-DEF
“(that) the visit made me happy”

In Danish, as in Dutch, predicative adjectives can co-occur with indirect objects (cf. Bennis (2003: 8)), and this makes it possible “to check whether a superficial subject is derived by movement from object position or not” (Bennis, 2003: 8). As in the examples above, the hypothesis is that “[i]f inversion is available, the subject has been moved” (Bennis, 2003: 8). Consider the following examples from Danish:

- (33a) (at) problemet forekommer ham glædelig(t)
(that) problem-DEF seems him happy-(N)
“(that) the problem seems joyous to him”
- (33b) (at) ham forekommer problemet glædelig(t)
(that) him seems problem-DEF happy-(N)
“(that) the problem seems joyous to him”

According to Bennis (2003: 8), this kind of pattern where the adjective parallels the ergative verb suggests that the former should be classified with the latter with respect to ergativity. Another criterion could point in the same direction, namely complementiser selection. In the words of Bennis (2003: 10), “[i]t is well-known that the form of the complementiser of a finite sentential complement (*that* or *whether*) depends on the properties of the matrix verb. This selection property only shows up when the sentential argument is the object of the verb”, and – as in Dutch – the variability of complementiser selection also occurs with so-called ergative adjectives in Danish. In the following examples, *interessant* (“interesting”) is morphologically related to *interessere* (“make interesting/give interest”):

- (34a) Det er uinteressant om/at solen skinner i morgen
It is uninteresting whether/that sun-DEF shines in morning
“It is uninteresting whether/that the sun will be shining tomorrow”
- (34b) Det er sjovt at/*om solen skinner i morgen
It is funny that/whether sun-DEF shines in morning
“It is funny that/whether the sun will be shining tomorrow”

Following Bennis (2003: 10), examples such as the one in (34a) should show that the ergative adjective *uinteressant* (“uninteresting”) selects a clausal argument which is its thematic object, whereas the unergative adjective *sjovt* (“funny”) in (34b) does not function as an object. The examples in (32)-(34) should suggest that it is possible to talk of ergative adjectives in Danish.

4.2.2.3. The structure of the AdjP

Baker (2006: 7) assumes that a syntactic difference between verbs and adjectives is that the verb has a Specifier, unlike the adjective. However, I shall follow Vikner (2001: 11) in claiming that the

predicative adjective has an AdjP-Spec in Danish, because this assumption allows for a syntactic account of the data in sections 2.2 and 3.3. Canonical predicative adjectival agreement (i.e. between the subject and the adjectival subject complement) would thus be the result of a Spec-Head agreement relation. The subject can be base-generated in AdjP-Spec, but since it must have Case, it raises to IP-Spec (or TP-Spec, depending on which framework one adheres to), where it can get Case. This is shown overtly on the morphology in the relevant examples (e.g. in examples (2a-f) where the pronominal subject is inflected for nominative Case). However, a consequence of this is that the copula “does not assign any thematic role to its subject” (Vikner, 2001: 12). The subject of the predicative may also be base-generated “inside the complement of Adj⁰” (Vikner, 2001: 12), in which case there is no agreement between the subject and the adjectival subject complement. The difference between the cases where there is overt number agreement between the object and the adjectival subject complement and those which exhibit agreement between the subject and the adjectival subject complement may be a difference between whether the subject of the adjective in question is base-generated in AdjP-Spec or inside the complement of Adj⁰. This would give a syntactic account of how the optionality comes to be in this agreement pattern, not only in the instances of movement to the left periphery, but also in the SVO-structures. Agreement between the predicative adjective and the object occurs in case the latter is base-generated in the AdjP-Spec, entering a Spec-Head agreement relation. The object needs Case, but as the adjective cannot provide this for it, though it does assign its thematic role, the preposition fills out this function. It may *a priori* seem unclear how the fact that the object functions as a topic in the information structure of the relevant sentences can cause the base-generation of the object in AdjP-Spec.¹¹ However, the syntactic analysis of the agreement mismatch phenomenon above allows the

¹¹ Though, according to Jackendoff (1987: 371), drawing on thematic roles is in many accounts a “thinly disguised wild card to meet the exigencies of syntax”, it might be relevant to mention that there is a fixed pattern with respect to which thematic roles the subject and the object receive in the type of construction that allows predicative adjectival agreement between the object and the predicate adjective. The subject systematically receives the role of EXPERIENCER and the object that of THEME:

- (a) Jeg er vilde med dem
I-SG am crazy-PL about them-PL
(EXPERIENCER) (THEME)
- (b) Vi er glad for den
We-PL are happy-SG about it
(EXPERIENCER) (THEME)
- (c) De er interesseret i hende
They-PL are interested-SG in her-SG
(EXPERIENCER) (THEME)
- (d) Han er sure på dem
He-SG is mad-PL at them-PL
(EXPERIENCER) (THEME)

morphological agreement marking to be accounted for independently of the assignment and checking of Case, which is exactly the desired result, because it appears as if the unexpected agreement pattern arises independently of Case-marking. Ultimately, the choice between object agreement and subject agreement in the relevant constructions is left up to the speaker.

As also pointed out by Baker (2006: 4), Cinque (1990) does not succeed in drawing on agreement phenomena as evidence that there should be a distinction between ergative and unergative adjectives. This should be so because both classes “agree in number and gender with their sole argument” (Baker, 2006: 4). Baker (2006: 5) argues that Italian restricts an ergative adjective from agreeing with “an NP embedded in a PP complement of A”, as is displayed in the following example (taken from Baker (2006: 5), referring to Cinque (1990: 13)):

- (35) *Era oscura/*oscuri a tutti la propria origine*
*Was obscure-F-SG/*M.PL to all-M.PL their own origin-F.SG.*
“Their own origin was obscure to everybody”

According to Baker (2006: 6), this lack of agreement “shows that adjectival agreement is subject to the activity requirement: there is no agreement with an NP whose case has already been checked by P”. However, as has been demonstrated at length in the examples above (e.g. examples (2a-f)), this is indeed possible in Danish predicative adjectival agreement constructions, and the data may thus present corroborating evidence in favour of Cinque’s (1990) theory of ergative adjectives:

- (36a) *Dem er jeg glad/glade for*
Them-ACC am I-NOM happy-UNERG/happy-ERG for
“I like them”
- (36b) *Jeg er glad/glade for dem*
I-NOM am happy-UNERG/happy-ERG for them-ACC
“I like them”

However, the data also face (at least) two setbacks with respect to Cinque’s (1990) theory: First, there is no ergative verb in Danish which has a morphological relation with the predicative adjective phrase *vild med* which - as we have seen - can easily occur in an agreement relation with its object. This has the following theoretical consequences: Either the ergative/unergative distinction of Cinque (1990) is not valid in Danish, or it is not dependent on the relevant adjective

The analysis above proposes that these thematic roles are assigned by the predicative adjective, rather than the finite auxiliary verb, and hence another key to the manifestation of ergative-unergative distinction in relation to the individual predicative adjectives might be found in the interaction between the thematic roles of THEME and EXPERIENCER.

being morphologically related to an ergative verb. Second, the phenomenon would be a case of a mismatch in yet another respect, namely that what we are witnessing is nominative/accusative Case system with ergative/unergative agreement, and this should not be a possibility in natural language, according to Woolford (2006: 3) who states that “[t]here is no language in which nominative subjects trigger ergative agreement because there is no such thing as true ergative agreement. Ergative is an inherent Case, and agreement can only be licensed by functional heads that potentially license structural Case”. These obstacles aside, the data do seem compelling as expressions of a split ergativity system, and in fact it seems difficult to explain the syntactic aspect of the data otherwise.

5. CONCLUSIONS

The basis of this dissertation was to find out *how* and *why* particular predicative adjective constructions in Danish allow agreement between the object and the adjectival subject complement when this sort of agreement is never found with verbs. Initially, an explanation was sought in the derivation-based approach of Belletti (1998, 2001) in which she proposes an Agreement projection through whose Specifier an agreeing object passes through on its way to the left periphery, allowing it to check its *phi*-features in a Spec-Head relation. However, as the object agreement phenomenon in Danish also occurs in constructions involving unmarked SVO word-order, movement does not seem to be the relevant trigger. Then the attempt of a unified account of agreement by Baker (2006) was presented and related to the Danish data, which revealed that the theory in question falls short in several respects, namely the intervention condition (the non-agreeing subject intervenes) and the activity condition (agreement takes place across a PP). The trigger of the agreement mismatch was subsequently argued to be found in the pragmatic relations of the relevant constructions, i.e. the fact that the object must function as a topic in order to participate in an agreement relation with the predicative adjective. Danish tends to associate the subject with the topic and, moreover, position the topic at the left periphery in order to make contextualisation efficient. It was then reasoned that in particular movement structures, the subject and the object compete for the same position, namely CP-Spec, which may affect with the status of the subject. Finally, a possible syntactic analysis of the phenomenon was offered through an implementation of Cinque’s (1990) theory of ergative adjectives. In constructions where the subject agrees with the adjectival subject complement, the former is base-generated in AdjP-Spec and thus checks its *phi*-features. In the case where the object agrees with the predicative adjective, the subject is base-generated inside the complement of the adjectival phrase and the base-generation of the object takes place in AdjP-Spec where a Spec-Head agreement relation thus occurs. Case-

assignment obtains independently of this dichotomy which is the desired result, given that the agreement mismatch ultimately is chosen by the speaker rather than an effect of syntactic structure. In other words, this dissertation reaches the conclusion that agreement can be partly semantic, which is also the result of Pollard and Sag (1994). Engdahl (1986: 151) argues the following:

“[I]n order to evaluate a given account of some linguistic problem, it is not sufficient to look at the problem only from a syntactic point of view or only from a semantic point of view. One could conceivably work out syntactic or semantic approaches which are extremely elegant and simple within their own domain but which entail ad hoc solutions in other areas. It is not until we look at the interaction of the syntactic and semantic rules that we are in a position to judge their relative adequacy for a given natural language.”

However, the analysis of the data presented here also demonstrates that agreement is sensitive to semantico-pragmatic relations, such as topic-focus structures in that it appears to be the case that the predicative adjective agrees with the pragmatic relation of topic, rather than - as expected - the syntactic relation of subject. The data of Danish phenomenon with respect to predicative adjectives suggest that it involves the interaction of syntactic structure, pragmatic functions and lexical semantics. Returning to Chomsky's (1981, 1982) essential levels of linguistic representation outlined in section 1, it would seem that agreement phenomena may exist that are independent of (i.e. not the consequence of) the syntactic operations and relations.

Though the conclusions reached here might not be directly applicable to crosslinguistic agreement patterns, the alternative analyses presented may be able tell us a great deal about the limits (or maybe rather the potential) of grammar.

References

- Andrews, A. D. 1982. "The Representation of Case in Modern Icelandic" in Bresnan, J. (ed.) *The Mental Representation of Grammatical Relations*. MIT Press, Cambridge, Mass., pp. 427-503.
- Baker, M. C. 2006. "The unity of verbal and adjectival agreement", Ms. To appear as Chapter 3 of *The Syntax of Agreement and Concord*. Cambridge University Press: Cambridge.
- Baker, M. C. 2006. "Parameters of Agreement", Ms. To appear as Chapter 5 of *The Syntax of Agreement and Concord*. Cambridge University Press: Cambridge.
- Belletti, A. 1990. *Generalized Verb Movement*, Torino, Rosenberg & Sellier.
- Belletti, A. 1992. "Agreement and Case in Past Participial Clauses in Italian" in *Syntax and Semantics*, vol. 26 *Syntax and the Lexicon*, Tim Stowell and Eric Wehrli editors, Academic Press, pp. 21-44.
- Belletti, A. 1998. "Agreement Projections". To appear in M. Baltin & C. Collins eds. *The Handbook of Syntactic Theory*. Blackwell.
- Belletti, A. 2001. "Past participle agreement", Ms. at www.ciscl.unisi.it/doc/doc_pub/partagr.doc
- Bennis, H. 2003. "Unergative adjectives and psych verbs", Ms. at <http://www.meertens.nl/medewerkers/hans.bennis/unacc.pdf>. Also appears in Alexiadou, A., Anagnostopoulou, E. and Everaert, M. (eds.), *The Unaccusativity Puzzle. Explorations of the Syntax-Lexicon Interface*. Oxford University Press: Oxford, pp. 84-113.
- Blake, B. 1994. "Case". Cambridge University Press: Cambridge.
- Bresnan, J. 1982. "Control and Complementation" in Bresnan, J. (ed.) *The Mental Representation of Grammatical Relations*. MIT Press: Cambridge, Mass., pp. 282-390.
- Burzio, L. 1986. *Italian Syntax: A Government-Binding Approach*. Dordrecht: Reidel.
- Chomsky, N. 1957. *Syntactic Structures*. Mouton: New York.
- Chomsky, N. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.
- Chomsky, N. 1982. *Some Concepts and Consequences of the Theory of Government and Binding*. MIT Press: Cambridge, Mass.
- Chomsky, N. 1986. *Knowledge of Language: Its Nature, Origin and Use*. New York
- Chomsky, N. 1986. *Barriers*. MIT Press: Cambridge, Mass.
- Chomsky, N. 1991. "Some Notes on Economy and Derivation and Representation" in Freidin, R. (ed.), *Principles and Parameters in Comparative Grammar*. Current Studies in Linguistics, Series no. 20. MIT Press: Cambridge, Mass.
- Chomsky, N. 1995. *The Minimalist Program*. MIT Press: Cambridge, Mass.

- Chomsky, N. 2001. "Derivation by phase" in Kenstowicz, Michael (ed.), *Ken Hale: A life in language*. MIT Press: Cambridge, Mass., pp. 1-52.
- Chomsky, N. 2002. *On Nature and Language*. Cambridge University Press: Cambridge.
- Chomsky, N. and H. Lasnik. 1993. "The theory of principles and parameters" in Jacobs, J, A. von Stechow, W. Sternefeld, and T. Vennemann (eds.), *Syntax: An International Handbook of Contemporary Research*. Walter de Gruyter: Berlin.
- Cinque, G. 1990. "Ergative Adjectives and the Lexicalist Hypothesis", *Natural Language and Linguistic Theory*, 8, 1-40.
- DeArmond, R. C. 2004. "Predicate Adjectives", Ms. Simon Fraser University, at <http://www.sfu.ca/person/dearmond/322/322.predicate.adj.htm>
- Dowty, D. and P. Jacobsen. 1988. "Agreement as a Semantic Phenomenon", J. Powers (ed.) *Proceedings of the 5th Annual Eastern States Conference on Linguistics*, Columbus: Ohio State University, Dept. of Linguistics, pp. 95-108.
- Egerland, V. 1996. *The syntax of past participles, a generative study of non-finite constructions in Ancient and Modern Italian*. Lund: Lund University Press.
- Engdahl, E. 1986. *Constituent questions*. Dordrecht: Reidel.
- Erteschik-Shir, N. 2006. "On the architecture of topic and focus", Ms. To appear in Molnar, Valeria and Susanna Winkler, eds. *The architecture of topic and focus*, Mouton de Gruyter, Berlin.
- Frampton, J. and S. Gutmann, 2000. "Agreement is feature sharing". Ms. North-eastern University.
- Guasti & Rizzi, 1999. "Agreement and Tense as Distinct Syntactic Positions: Evidence from Acquisition", Ms.
- Hestvik, Arild. 1991. "Subjectless binding domains" in *Natural Language and Linguistic Theory*, Volume 9, Number 3/August, pp. 455-496.
- Holmberg, A. 2002. "Expletives and agreement in Scandinavian passives" in *Journal of Comparative German Linguistics* 4: 85-128.
- Jackendoff, R. 1987. "The status of thematic relations in linguistic theory" in *Linguistic Inquiry* 18, pp. 369-411.
- Jespersen, O. 1924. *The Philosophy of Grammar*. Allen and Unwin: London.
- Jensen, E. S. 2003. Case in Middle Danish. A double content system. In Blake, Barry J. & Kate Burridge (eds.): *Historical Linguistics 2001. Selected Papers from the 15. International Conference on Historical Linguistics, Melbourne*. Amsterdam & Philadelphia: John Benjamins Publishing Company, pp. 221-236.
- Jensen, J. V. 1901. *Kongens Fald*. Gyldendal: Viborg.
- Julien, M. 2002. *Syntactic heads and word formation*. Oxford University Press: New York.

- Julien, M. 2007, "On the relation between morphology and syntax" (<http://www.Hum.uit.no/a/julien/Interfaces-Julien.pdf>) to appear in Ramchand, Gillian and Charles Reiss (eds.) *The Oxford Handbook of Linguistic Interfaces*. Oxford University Press, Oxford.
- Kaplan, R. M. and J. Bresnan. 1982. "Lexical Functional Grammar: A Formal System for Grammatical Representation" in Bresnan, J. (ed.) *The Mental Representation of Grammatical Relations*. MIT Press, Cambridge, Mass., pp. 173-281.
- Kayne, 1983. *Connectedness and Binary Branching*. Dordrecht, Foris.
- Kayne, 1989. "Facets of Romance Past Participle Agreement" in P. Benincà ed., *Dialect Variation on the Theory of Grammar*. Dordrecht, Foris, pp. 85-104.
- Lambrecht, K. 1994. *Information structure and sentence form*. Cambridge University Press: Cambridge.
- Marantz, A. 2000. "Case and Licensing" in Reuland, E. (ed.). *Argument and Case: Explaining Burzio's Generalization*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Molnar, V. 1998. "On the Syntax, Phonology, Semantics and Pragmatics of the So-Called "Contrastive Topic" in Hungarian and German". *Acta Linguistica Hungarica*, 45, 1-2, pp. 89-166.
- Napoli, D. J. 1993. *Syntax. Theory and Problems*. Oxford University Press: New York.
- Neeleman, A. and H. Van de Koot. 2002. "The Configurational Matrix" in *Linguistic Inquiry*, 33, 4/Fall, pp. 529-574.
- Obenauer, H. G. 1992. "L'interprétation des structures wh et l'accord du participe passé" in Obenauer, H. G. And A. Zibri-hertz (eds.), *Structure de la phrase et théorie du liage*.
- Obenauer, H. G. 1994. *Aspects de la Syntaxe A'*. Thèse d'État. Université de Paris 8.
- Pollard, C. and I. Sag, 1994. *Head-Driven Phrase Structure Grammar*. Stanford and Chicago: CSLI Publications and University of Chicago Press
- Pollock, 1989. "Verb Movement, Universal Grammar and the Structure of IP". *Linguistic Inquiry*, 20, pp. 365-424.
- Radford, A. 2004. *English Syntax. An Introduction*. Cambridge University Press: Cambridge.
- Sigurðsson, H. Á. 2004. "Agree and agreement: evidence from Germanic" in *Focus on Germanic Typology*, Werner Abraham (ed.), *Academie Verlag: Berlin*, pp. 61-103.
- Togeby, O. 2003. *Fungerer denne sætning?* Gads Forlag: Copenhagen.
- Van Valin, Jr., R. D. and R. J. LaPolla, *Syntax. Structure, meaning and function*. Cambridge University Press: Cambridge.
- Vikner, S. 1995. *Verb Movement and Expletive Subjects in Germanic Languages*. Oxford University Press: Oxford.

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- Vikner, S. 2001. "Predicative Adjective Agreement" in Adamzik, K and H. Christen (ed.), *Sprachkontakt, Sprachvergleich, Sprachvariation. Festschrift für Gottfried Kolde*. Niemeyer: Tübingen, pp. 399-414.
- Wechsler, S. 2004. "Number as Person". *Proceedings of the Fifth Syntax and Semantics Conference in Paris* at uts.cc.utexas.edu/~wechsler/NumberAsPerson.pdf. Also appears in Olivier Bonami and Patricia Cabredo Hofherr (eds.) *Empirical Issues in Syntax and Semantics 5*, pp. 255-274.
- Woolford, E. 2006. "Case-Agreement Mismatches" at <http://people.umass.edu/ellenw/Woolford%20Case-Agreement%Mismatches.pdf>. Also to appear in C. Boeckx (ed.), *Agreement Systems*. John Benjamins.