## Henrik Garnvik

# Norwegian gjøre and British do:

a little-v approach to Norwegian and English auxiliaries

Master's thesis in English with Teacher Education Supervisor: Andrew Weir May 2022

NTNU Norwegian University of Science and Technology Eaculty of Humanities Department of Language and Literature



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## Abstract

This thesis is a comparative analysis of auxiliary verbs in Norwegian and English. Auxiliary verbs are well discussed and defined in English literature, thanks to the NICE properties proposed by Hudllestone (1976), among other things. The status of auxiliary verbs are less clear in other languages, on the other hand. The main aim of this thesis is to establish for which category auxiliary verbs are in Norwegian, for which there is no consensus in Scandinavian language. Houser et al. (2011) claims *gøre*, which is an equivalent of *do* in English and *gjøre* in Norwegian, is a category of auxiliary verb, with the clear purpose of refuting its status as potentially a category of v, V or T.

To find the category of *gjøre*, and in a bigger context, auxiliary verbs, this thesis challenges Houser et al. (2011) arguments for treating *gøre* as a category of aux. Instead, I demonstrate how Norwegian gjøre can be a category of v. As a theoretical framework, this thesis uses Harwood (2014) who has outlined a structure for auxiliary verbs. To demonstrate how Norwegian auxiliary verbs can be of category v, this thesis places the passive auxiliary verbs *bli* and *gjøre* in Harwood's (2014) structure and compares them to their English equivalents *be* and *do*. Moreover, by looking at a variant of English, British English, and a use of *do* particular to this variant, this thesis seeks to draw parallels between the category of British English *do* and Norwegian auxiliary verbs for explaining how they can be of category v.

## Sammendrag

Denne masteroppgaven er en komparativ analyse av hjelpeverb på norsk og engelsk. Hjelpeverb er godt diskutert og definert i engelsk litteratur, blant annet på grunn av Huddlestone (1976) og hans NICE-egenskaper. Hjelpeverb er derimot mindre definert og tydelig på andre språk. Hovedmålet med denne masteroppgaven er å fastslå hvilken kategori hjelpeverb er på norsk, hvilket det ikke er konsensus om i skandinaviske språk generelt. Houser et al. (2011) hevder *gøre*, som tilsvarer *do* på engelsk og *gjøre* på norsk, er i kategorien hjelpeverb, med det klare formål å tilbakevise statusen til *gøre* som potensielt en kategori av v, V eller T.

For å kartlegge kategorien til norske *gjøre*, og i en større sammenheng, hjelpeverb generelt, utfordrer denne oppgaven argumentene til Houser et al. (2011) som omtaler danske *gøre* som en kategori av hjelpeverb. I stedet viser jeg hvordan *gjøre* også kan være av kategorien v. Som et teoretisk rammeverk bruker denne oppgaven Harwood (2014) som har skissert en struktur for hjelpeverb. For å demonstrere hvordan norske hjelpeverb kan være av kategorien v, plasserer denne masteroppgaven de passive hjelpeverbene *bli* og *gjøre* i strukturen til Harwood (2014) og sammenligner dem med deres engelske ekvivalenter *be* og *do*. Ved å se på en variant av engelsk, britisk engelsk, og en bruk av *do* som er unik for denne varianten, forsøker denne oppgaven å trekke paralleller mellom kategorien av britisk engelsk *do* og norske hjelpeverb for å forklare hvordan de kan være av kategori v.

# Acknowledgements

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*Henrik Garnvik* Trondheim, mai 2022

# **Table of contents**

1 INTRODUCTION AND PRE-THEORETICAL DISCUSSION OF AUXILIARIES	4
2 OVERVIEW OF VERB PROPERTIES AND CLAUSE STRUCTURE	7
2.1 NICE-PROPERTIES	7
2.1.1 Negation	7
2.1.2 Inversion	8
2.1.3 Code	8
2.1.4 Emphasis	9
2.2 NICE PROPERTIES APPLIED TO NORWEGIAN	9
2.2.1 Negation	10
2.2.2 Inversion	10
2.2.3 Code	11
2.2.4 Emphasis	12
2.3 THE FORMAL TREATMENT OF VERBS AND AUXILIARIES	13
2.3.1 Do-support	13
2.3.2 X-bar theory and clause structure	14
2.3.3 CP-TP-VP structure	15
3 ANALYSIS OF THE AUXILIARY VERB	32
3.1 DO AUXILIARY VERBS CONSTITUTE A SEPARATE CATEGORY FOR THEMSELVES?	32
3.2 A more thorough analysis of VP and TP	32
3.2.1 VP and vP	33
3.2.2 Gjøre-support	36
3.2.3 British English do	41
4 SUMMARY	47
5 LITERATURE	48

# Norwegian *gjøre* and British *do*: a little-v approach to Norwegian and English auxiliaries

## 1 Introduction and pre-theoretical discussion of auxiliaries

Within the field of linguistics and particularly the branch of syntax, it has historically been contested whether there exists such a category that is called *auxiliaries* or whether these kinds of verbs should be treated just like other verbs, implicating they belong to the same class as what we refer to as *main verbs* or *lexical verbs*<sup>1</sup> (Palmer (1979); Hauge (2003); Lasnik et al. (2000)). The background for this discussion is that some verbs seem to behave differently and thus have different properties than other verbs. In English, this case seems to be quite straightforward, as exemplified by these sentences:

- (1) Adam doesn't play football anymore.
- (2) \*Adam playn't football anymore.<sup>2</sup>
- (3) Do you know her?
- (4) \*You know her?<sup>3</sup>
- (5) \*Know you her?

It is obvious that something is going on with respect to the verbs in the sentences above. The verb *do* shows different behavior with respect to negation and question formation compared to the verbs *play* and *know*.

In fact, learners of English in the Norwegian school system are explicitly taught the concept of *auxiliaries* in the classroom. Auxiliary verbs are explained as a limited set of verbs that have defined characteristics. However, in other languages, this very same concept might not always be as evident as it is in English. Based on the Norwegian translation of the sentences above, it appears that Norwegian does not have these same verbal issues as English does<sup>4</sup>:

- (6) \*Adam gjør ikke spille fotball lengre.
- 'Adam do not play football anymore.'
- (7) Adam spiller ikke fotball lengre. Adam play.PRES not football anymore. 'Adam doesn't play football anymore.'
- (8) \*Gjør du kjenne henne? 'Do you know her?'
- (9) Kjenner du henne? know.PRES you her?' 'Do you know her?'

Nevertheless, other sentences indicate that something is going on with verbs in Norwegian as well. Some verbs seem to behave differently from verbs we refer to as main verbs. Notice how the verb in (10) can stand alone and give the sentence meaning

 $<sup>^{1}\,\</sup>text{I}$  will use the term 'main verbs' instead of 'lexical verbs' throughout this text.

<sup>&</sup>lt;sup>2</sup> The asterisk indicates that the sentence is ungrammatical.

<sup>&</sup>lt;sup>3</sup> This sentence is acceptable in colloquial language in a context where someone is mentioned or introduced in a specific setting. In a written context-free setting this is syntactically ungrammatical.

<sup>&</sup>lt;sup>4</sup> Example (4) is not translated into Norwegian as it gives a wrong word order in Norwegian, thus it is ungrammatical in both English and Norwegian.

(i.e., making it grammatical), as opposed to the verb in (11). However, if the verb in (11) is complemented with another verb, in this case the verb in (10), the sentence suddenly becomes grammatical as (12) shows. If we invert the two verbs, on the other hand, the sentence becomes ungrammatical, as (13) illustrates:

(10)	Adam	kommer	snart.	
	Adam	comes.PRES	soon.	
	'Adam comes	s soon.'		
(11)	*Adam bør s	nart.		
	'Adam should	d soon.'		
(12)	Adam	kan	komme	snart.
	Adam	can.PRES	come.INF	soon.
	'Adam should	d come soon.'		
(13)	*Adam komr	ne kan snart.		
		,		

'Adam come can soon.'

Considering that both *bør* (should) and *komme* (come) are verbs, why can the verb in (10), *komme*, stand alone and still make the sentence grammatical, while the verb in (11), *bør*, cannot? Note also how the verb *kommer* consequently changes its form from present tense in (10) to infinitive in (12), and how the ungrammaticality of (13) tells us there is a restriction on the order of the verbs. These examples testify that Norwegian also has some verbs that stand out from other verbs.

Based on both the English and Norwegian sentences above, it seems that the phenomenon we are interested in has certain characteristics in both languages. Characteristic of the kind of thing that we are interested in is that they look like verbs in many respects. The examples in (1) and (3) prove that they show subject-verb-agreement, which is a property also shared by verbs. Furthermore, the appearance of the type of words we are interested in seems to take over the finiteness of the sentence, leaving the other words, which we in fact know are verbs, infinite. Moreover, they take VPs as compliments (12), they precede negation (1), and they can contract with negation suffix (1). In this context, one might ask whether such types of verbs constitute a separate syntactic category, or whether they are verbs of category V. If it turns out that they constitute their own category, the characteristics mentioned above are at minimum the kind of characteristics we expect this category to have. Moreover, if it really is a category of its own, what goes in this category of auxiliaries? These are questions that need to be addressed in order to claim that auxiliaries are in fact a category of their own.

Ultimately, I will look at whether there is a difference between categories main verbs and auxiliary verbs. This is evident in English, but not in Norwegian. To support this difference, I will implement structures from Harwood (2014) which will be discussed. Under this analysis, the Norwegian equivalent to English *do*-support, *gjøre*-support, is of particular interest. This verb seems to have certain properties which gives a theory about British English *do* and the other way around, which can strengthen the argument that auxiliaries in both languages belong to the category of little v which is in contrast to category auxiliary verbs.

This thesis is structured as follows: first, I will present NICE properties, which we will see is crucial for determining whether a verb is an auxiliary verb or not in English. These properties will also be applied to Norwegian. Second, I will account for *do*-support, which naturally accounts for x-bar theory and an overview of the clause structure. Thereafter, I will examine VP more closely and look at what is between VP and TP. In this context, I will discuss VP, vP, *gjøre*-support and British English *do*, which are all relevant in the discussion of categories of little v and auxiliary verbs. Finally, I will summarize my findings.

## 2 Overview of verb properties and clause structure

This section aims to give a general idea of verb properties and clause structure in Norwegian and English. To show verb properties, I will use the NICE-properties, which will be explained in more detail in the next subchapter. The structure of the overview is highly inspired by Hauge (2003) to give a clear insight in the different verb properties. Finally, the clause structure in both Norwegian and English will be described in an X-bar framework.

### 2.1 NICE-properties

If auxiliary verbs in fact are different from the category referred to as main verbs, some verifiable diagnostics are needed which show that each such verb does indeed have different characteristics and behave differently. One influential set of diagnostics for English verbs was proposed by Rodney Huddlestone in his article *Some Theoretical Issues in the Description of the English Verb* published in 1976. In this article, he came up with the acronym NICE, of which each letter constituted a syntactic test that demonstrated how English auxiliaries have properties that distinguishes them from English main verbs: **n**egation, **i**nversion, **c**ode and **e**mphasis. It is worth noting that there are different interpretations of NICE in later literature (negation, inversion, contraction, ellipsis (Kim, 2002)), but I will not explore this further as the different interpretations have the same essence. In general, they deal with the same diagnostics, even though they are placed under different letters of NICE. In what follows, I will go through each of the NICE properties proposed by Huddlestone (1976) and provide examples of each of the syntactic properties.<sup>5</sup>

#### 2.1.1 Negation

By applying negation to the sentence, some verbs seem to always remain grammatical when they are followed by the sentential negator *not*, while some verbs seem unable to precede the negator, meaning it will leave the sentence ungrammatical (Kim, 2002, p. 1039).

- (14) Kevin will not sing a song.
- (15) Kevin can not sing yet.
- (16) \*Kevin sings not a song.
- (17) \*Kevin sings not.

Evidence from the sentences in (14)-(17) tell us that only auxiliary verbs can be followed by *not*, while main verbs cannot. Moreover, this is not limited to the negator *not* as some verbs are also sensitive to contraction with the suffix n't.

- (18) Kevin won't sing a song.
- (19) Kevin can't sing a song.
- (20) \*Kevin singsn't a song.
- (21) \*Kevin playsn't football.

The grammaticality of (18) and (19) affirms that only auxiliary verbs can contract with the suffix n't to form negation, as opposed to main verbs which become ungrammatical if they are contracted with n't (20) and (21).

<sup>&</sup>lt;sup>5</sup> Note that this applies to the English language.

#### 2.1.2 Inversion

Another syntactic property which distinguishes auxiliary verbs from main verbs, is the possibility to invert with subjects to change the clausal structure. Auxiliary verbs can undergo such an inversion, called subject-auxiliary inversion, while main verbs cannot (Kim, 2002, p. 1039). This point is exemplified below:

- (22) Will Ben sing a song?
- (23) Can Ben sing a song?
- (24) \*Sings Ben a song?
- (25) \*Plays Ben football?

The ungrammaticality of (24) and (25) shows that main verbs cannot invert with the subject like auxiliary verbs (22 and 23).

#### 2.1.3 Code

The syntactic property of code refers to sentence constructions where a previously mentioned verb phrase is omitted, while the first auxiliary verb is repeated. In this regard, Hauge mentions how main verbs can be picked up by auxiliary verbs in the same way that a noun can be picked up by a pronoun (2003, pp. 57-58). In this case, she specifically mentions «and so» constructions (26-30).

- (26) I should sing a song, and so should you.
- (27) \*I sang a song, and so sang he.
- (28) Noah can sing, and so can they.
- (29) \*Noah can sing, and so sing they.
- (30) Noah sings beautifully, and so does she.

As sentence (30) shows, in cases where there is no auxiliary available, English needs to apply *do*-support to rescue and maintain the grammaticality of the sentence. The phenomenon of *do*-support will be reviewed in more detail in section 2.3.1.

Code also involves syntactic constructions that are called *tag questions* (31-35) and *ellipsis* (36-39) in the literature. Only auxiliaries can appear as tags in tag questions, while main verbs cannot. In constructions with ellipsis, it also seems like the complement of an auxiliary can be omitted unlike complements of main verbs. The latter cases lead to ungrammaticality (Nordquist, 2020).

- (31) Noah should not sing a song, should he?
- (32) \*Noah should not sing a song, sing he?
- (33) Noah sings a song, doesn't he?
- (34) \*Noah sings a song, sings not he?
- (35) \*Noah sings a song, sings he not?
- (36) If anyone is playing football, Noah is \_.
- (37) \*If anyone loves playing football, Noah loves\_.
- (38) Noah never listens, but Peter does.
- (39) \*Noah always takes a Covid test, but Peter never takes.

The grammaticality of (31) and (33) and ungrammaticality of (32), (34) and (35) support the fact that only auxiliary verbs can appear as tag questions. When a main verb has the role of tag in a tag question, the sentence is ungrammatical. Likewise, example (37) and

(39) show how main verbs cannot omit their complement in ellipsis constructions, as opposed to auxiliaries (36) and (38).

#### 2.1.4 Emphasis

The final property of NICE is emphasis which deals with notions of affirmation and disagreement. Emphasis includes, for example, prosodic emphasis which tells how something is uttered (Nordquist, 2020). In this context, auxiliary verbs differ from main verbs in the way that they can be stressed. However, it is worth noting that because of focus purposes, every verb can be stressed. For example, there is a difference between the (a) and (b) sentences in (40) and (41). The stress is indicated by italics.

- (40) a. I *saw* it.
  - b. I *did* see it.
- (41) a. I didn't *hear* it.
  - b. I *didn't* hear it.

All the examples above are grammatical, but they differ in what kind of focus they involve. For instance, the (a) sentences are more natural if you are questioning the kind of action involved ('I *saw* it, I didn't *hear* it'), while the (b) sentences are more appropriate in cases with emphatic affirmation of a doubtful statement or denial of a negative statement. In the latter case, auxiliary verbs differ from main verbs in the way that they can be used for emphatic affirmation of a doubtful statement or denial of a negative statement, following the lines of the (b) sentences mentioned above (Hauge, 2003, p. 58).

- (42) I *did* see it. (you thought I did not see it)
- (43) #I did *see* it.<sup>6</sup>
- (44) She *can* play the piano. (you are wrong to think she cannot play the piano)
- (45) #She can *play* the piano.

Saying the sentences in (43) and (45) with the stress on *see* and *play* would sound unnatural in colloquial language in a context where you want to deny or affirm a statement. This is not the case in (42) and (44) where you stress the auxiliary verbs *did* and *can*.

#### 2.2 NICE properties applied to Norwegian

As I mentioned in the introduction to the previous section, the NICE properties were designed to distinguish main verbs from auxiliary verbs in the English language. By applying different diagnostic tests, we saw how properties of English auxiliary verbs and English main verbs were distinguishable. However, as Hauge (2003, p. 54) points out, auxiliary properties are not universal, which means that their characteristics may vary between different languages. In other words, the diagnostics used in NICE might not work in the same way in Norwegian as they do in English. In this subsection, I will see how the Norwegian language fits into the framework of NICE properties outlined by Huddlestone (1976). As a point of departure, I will use Hauge (2003) who has tested and applied Norwegian data to the NICE properties in addition to examples of my own.

<sup>&</sup>lt;sup>6</sup> The hash mark is used to mark unnatural stress and intonation in colloquial language, and does not mark syntactical ungrammaticality like the asterisk.

#### 2.2.1 Negation

The tests for negation showed that English main verbs could not precede the negator *not*, nor be cliticized with the suffix n't. Auxiliaries, on the other hand, were able to both precede *not* as well as to cliticize with the suffix n't. In Norwegian, these two properties are not unique to auxiliaries (Hauge, 2003, p. 55). Unlike English, the Norwegian language allows main verbs to precede the negator *ikke* (46) as well as to cliticize with suffix in colloquial language (47).

(46)	Jeg spiller ikke fotball. I play.PRES not footb I don't play football.'		
(47)	Du vet'ke You know.PRES.n't 'You don't know anything.'	noe. <sup>7</sup> anything	(`du vet ikke noe')

These examples demonstrate that the diagnostic tests of negation are invalid in Norwegian since the property of negation fails to distinguish auxiliaries and main verbs in Norwegian like it does in English.

#### 2.2.2 Inversion

The property of inversion demonstrates how main verbs and auxiliary verbs are distinguishable in English in the way that only auxiliaries have the property which allows them to be inversed with the subject. This is particularly used in interrogative constructions. Like the property of negation, inversion is not a property unique to auxiliaries in Norwegian either (Hauge, 2003, pp. 56-57). As opposed to English, both auxiliary verbs (48) and main verbs (49) can be inversed to form interrogative constructions in Norwegian.

(48)	Har	du	spilt	fotball?
	Have.PRES	you	play.PTCP	football?
	`Have you pl	ayed fo	otball?'	
(49)	Spilte	du fo	tball?	
	'Play.PAST	you fo	otball?'	
	`Did you play	y footba	11?'	

Moreover, Norwegian is not restrictive to which constituent initiates a declarative sentence to cause subject-verb inversion. Therefore, an inversion of subject and verb can be preceded by an adverbial (Hauge, 2003, p. 57).

(50)	I forrige måned fikk	jeg	en	ny	jobb.
	In last month get.P	AST I	а	new	job.
	'Last month, I got a new jo	b.'			
(51)	Dessverre spiste	faren din		hele	kaken.
	Unfortunately eat.PAST	father yours		entire	cake.DEF
	'Sadly your father ate the e	entire cake.'			

The diagnostic test of inversion reveals how Norwegian also differs from English with respect to inversion of subject and verb. This includes not only which verbs can be inverted, but also which constituents can initiate an inversion of subject and verb. In

<sup>&</sup>lt;sup>7</sup> Such sentences where the main verb is cliticized with a negative suffix are not manifested in written standard Norwegian, but they are rather frequently used in colloquial language (Hauge, 2003, p. 56)

English, inversion most often occurs in interrogative sentences, while in Norwegian they often also occur in declarative sentences, in addition to having the property of being preceded by adverbials (50 and 51).

#### 2.2.3 Code

Until this point, the two first diagnostic tests show that Norwegian differs from English in that main verbs and auxiliary verbs are not distinguishable, unlike in English. The property of code, on the other hand, applies to Norwegian in the same way as it does in English (Hauge, 2003, p. 58):

(52)	Ola lyver aldri, m Ola lie.PRES never, b			FS				
	'Ola never lies, but Sim		uonin	201				
(53)	-	ldri en dusj	, m	en Simo	on tar.			
	Ola take.PRES ne	ever a sho	wer, b	ut Simo	on take	PRES.		
	'Ola never takes a show	wer, but Sim	ion tak	es.'				
(54)	-	natten	-				Kari og	g.
	I sleep.PRES in	-		d so	do.PRE	S	Kari to	00.
	'I sleep at night, and so							
(55)	•			og det			Kari	og.
	I. sleep.PRES in			and so	sleep	.PRES	Kari	too.
(50)	'I sleep at night, and so			0				
(56)	Kari kjenner Ola, og			-				
	Kari know.PRES Ola, ar 'Kari knows Ola, and so		=S I	too.				
(57)	*Kari kjenner Ola, og		er	jeg	ດດຣຸລິ			
(37)	Kari know.PRES Ola, a				too.			
	'Kari knows Ola, and so			-				
(58)		/nge en	sang,	og det	: kan		han	også.
. ,	• •	ng.INF as	-	-			he	too.
	'I can sing a song, and	so can he to	00.'					
(59)	Ruben synger nå	à,	gjør		han	ikke?		
	-	-	do.PRE	S	he	not?		
	'Ruben sings now, does	-						
(60)	*Ruben synger		synger		han	ikke?		
		-	sing.Pl	RES	he	not?		
(c1)	'Ruben sings now, does		til fall	( a t	aia		han	ildead
(61)	Statsministeren ta Prime.minister.DEF sp			ket, Delo DEl			han he	ikke? not?
	'The Prime Minister spe					<b>NL</b>	ne	not:
(62)	•		til folk			er	han	ikke?
(02)	Prime.minister.DEF sp					eak.PRE		not?
	'The Prime Minister spe							
(63)		, bise	kjøtt,			han	ikke?	
	Bjørn can.PRES ea	at.INF	meat	can.PR	ES	he	not	
	'Bjørn can eat meat, ca	an't he?'						
(64)	• •	oise	-	spiser		han	ikke?	
	5	at.INF	meat	eat.INF	=	he	not	
	'Bjørn can eat meat, ca	an't he?'						

The examples above indicate that Norwegian seems to behave like English when it comes to the property of code. By that, I mean that Norwegian seems to distinguish between verbs which allows for such constructions and not. Norwegian seems to allow the same type of ellipsis as English, for example in questions and tags. The examples in (52) and (53) demonstrate how auxiliaries may be stranded where a main verb has been omitted, while the main verb cannot be stranded. Furthermore, (59-64) show how only auxiliary verbs can show up in tags and not main verbs, exactly like English. Considering tag construction involve inversion, this is interesting since the property of I(nversion) has already exhibited how Norwegian allows for inversion of both what English refers to as main verbs and auxiliary verbs. However, in this case, only auxiliary verbs are allowed to inverse with the verb in the tag question. Thus, Norwegian seems to share this C(ode) property with English in many ways.

#### 2.2.4 Emphasis

Like in the cases of N(egation) and I(nversion), Norwegian differs from English when it comes to the property of emphasis as well. Recall that English allows for stress on any verb for the purpose of focus, but only auxiliaries can be stressed in order to affirm a doubtful statement or deny a negative statement (Hauge, 2003, p. 58). Regarding the latter case, Norwegian does not only stress an auxiliary, but a main verb can also be stressed to affirm a doubtful statement or deny a negative statement (Hauge, 2003, p. 58).

,				
(65)	Jeg	kan	spille	piano. (you are wrong to think that I
	Ι	can.PRES	play.INF	piano
	canne	ot play the pia	no)	
	`I car	n play the pian	0.'	
(66)	Jeg	spiller	piano. (you	are wrong to think that I do not play the
	Ι	play.PRES	piano	
	pianc	)		
	`I pla	y the piano.'		

The examples in (65) and (66) illustrate how both main verbs and auxiliary verbs can be stressed to affirm a doubtful statement. This contrasts with English where only auxiliaries can be stressed to have the same function (see section 2.1.4).

A review of the NICE properties applied to Norwegian shows that characteristics of main verbs and auxiliary verbs are different in Norwegian and English. The NICE properties distinguish main verbs from auxiliary verbs in each of the diagnostic tests in English, while in Norwegian neither negation, inversion nor emphasis distinguish main verbs from auxiliary verbs. It is just in the case of code that Norwegian seems to behave like English in that main verbs and auxiliary verbs are distinguishable. Several of the cases where English and Norwegian are different are related to *do*-support, as Hauge (2003, p. 59) points out. The phenomenon of *do*-support will be reviewed more detailed in the next section.

#### 2.3 The formal treatment of verbs and auxiliaries

The previous section demonstrated that Norwegian and English differ in the properties of auxiliary verbs and main verbs. Several of these cases relate to the phenomenon *do*-support. This section presents this phenomenon in more detail (section 2.3.1), before it covers X-bar theory and clause structure (section 2.3.2) in a CP-TP-VP structure (section 2.3.3).

#### 2.3.1 Do-support

The phenomenon *do*-support has already been mentioned in this thesis. As a reminder, look at these previously mentioned sentences repeated in (67-69):

- (67) \*You know her?
- (68) Do you know her?
- (69) Noah sings beautifully, and so does she.

Examples such as those above tell us that something going on in terms of syntax. Hauge (2003, p. 59) explains *do*-support as "an operation that takes place when a verb is required in a certain position and the lexical verb cannot be in that position". That is to say, *do*-insertion is syntactically required to save the grammaticality of a sentence. It would not appear if there was any other auxiliary present in the sentence (Hauge, 2003, p. 59). Again, if you look at the examples above, you will notice that the insertion of *do* does not add any meaning to the sentence. The difference between the ungrammaticality of (67) and grammaticality of (68) is simply a syntactic one by the insertion of *do*, and not a semantic one. The example in (69) also tells us that *do* is required in certain constructions, such as in this "and so" construction. If *does* in the second clause is replaced by the verb in the first clause, *sings*, the sentence becomes ungrammatical: *\*Noah sings beautifully, and so sings she*. I will not justify the phenomenon of *and so*-constructions more thoroughly than this as they are comprehensive enough to have their own theses. Instead, with this example, I want to emphasize that *do*-support is also needed in certain syntactic constructions.

According to Han and Kroch (pp. 1-2, 2000), *do*-support is required in different sentence constructions, such as in negative declaratives (70), negative imperatives (71) and yes-no questions (72).

- (70) I did not know.
- (71) Do not leave!
- (72) Did you eat the pizza in the fridge?

This leads to the question of why *do*-support is needed at all. The answer to this question is complex and consists of various factors, but a fundamental reason lies in verb movements. In the next subsections, I will outline the sentence structure in both Norwegian and English to show how verb movements work in general. I will start by showing these facts about *do*-support, which I will explain by giving a general discussion about how auxiliary verbs and verb movement work in English and Norwegian.

Some English verbs have NICE properties as shown in the NICE properties section. I want to emphasize that by 'verbs' I refer to all verbs in this case, and not just main verbs or auxiliary verbs isolated alone. It is nevertheless the case that all auxiliary verbs in English have NICE properties, while verbs that are not auxiliary verbs do not have NICE properties, though. This was evidenced by the many examples under each section of the

different properties. However, in Norwegian, it seems to be the case that all verbs have the properties that are N(egation), I(nversion) and E(emphasis). In other words, it is not just auxiliary verbs that possess these properties in Norwegian, but also verbs that are not auxiliary verbs, as opposed to English. Consequently, it is not immediately clear that there is a subclass 'auxiliary verbs' in Norwegian based on these properties and examples alone like it is in English.

This leads to a need for clarification; why is it so that some English verbs have the N, I, E properties and some do not, but all Norwegian verbs do? To explain this, it is expedient to look at the syntactic tree structure.

#### 2.3.2 X-bar theory and clause structure

The model of syntax I am assuming for the clause structure is the *X-bar theory* first modelled by Chomsky (1965), which has later been developed by other linguists, such as Jackendoff (Gelderen, 2013, p. 4). The X-bar theory rejected the earlier assumed phrase structure rules in favor of general category-neutral principles (Stowell, 1981, p. 61). The main idea with X-bar theory is that all phrases look the same with a head, a specifier, a complement and possibly an adjunct (Gelderen, 2013, p. 8). That is to say, the X-bar theory does not depend on the identity of a categorical element, but is rather universal (Stowell, 1981, p. 65). For example, instead of having specific rules for the categories PP, VP, NP, etc., the x-bar scheme in (10) can generate rules for any lexical category (Gelderen, 2013, p. 8).

(10) a.  $XP \rightarrow YP \quad X' \quad (YP = Specifier)$ b.  $X' \rightarrow X \quad ZP \quad (ZP = Complement)$ c.  $XP \rightarrow WP \quad XP \quad (WP = Adjunct)$ (where X, W, Y, and Z stand for N, V, A, and P)

Figure 1: X-bar scheme.

This is not meant to apply only to English, but for all phrases in all languages, as Stowell emphasizes (1981, p. 66).

The X-bar theory contains a set of rules that are common for all phrases. Stowell (1981, p. 70) summarizes these in three rules as follows: First, all phrases are endocentric. That means that every phrase must have a head which determines what a phrase should look like (Carnie, 2012, p. 173). The phrase beings in the head and then projects up to the other two levels, as illustrated below:

NP	PP	AdvP	AP
I	I	I	I
Ν′	Ρ′	Adv'	Α′
I	I	I	I
Ν	Р	Adv	Α
pizza	below	often	sad

Second, all phrases consist of three components that are head, specifier and complement. These are placed in the positions that are ZP,  $X^0$  and YP in the illustration

below which illustrates the relationship between the three components and the phrase levels:

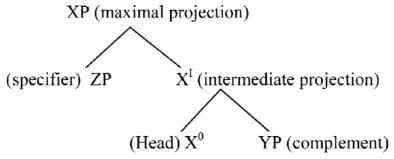


Figure 2: The structure of phrases in X-bar theory.

An important note in this regard is the principle of binarity. This principle stipulates that every node branches into two different nodes, as figure 2 illustrates. Consequently, it is not possible to generate phrases such as *Sarah my family the cat eat pizza* or *Sarah eats pizza window the car keys* in the X-bar scheme.

Third, there are three levels of structure in each phrase – phrase level, intermediate level and head level – which are all illustrated in figure 2 above. A phrase is determined by the head which projects up to the intermediate level before it projects up to the maximal projection also known as phrase level. These levels of structure are evident in both illustrations above.

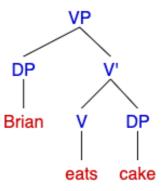
#### 2.3.3 CP-TP-VP structure

The discussion in the rest of this section which deals with sentence structure draws heavily from Haegeman and Guéron (1999)<sup>8</sup> who explains sentence structure in *English grammar: A generative perspective*.

Tree structures reveal syntactic spines and show how verb movement takes place differently in the respective languages. As Gelderen (2013, p. 31) puts it, there are three layers of the clause in which the highest layer, CP, provides pragmatic information, the middle TP-layer marks grammatical agreement, while the VP-layer provides lexical and thematic information. A natural place to begin is in the verb projection (VP), which is the lowest projection. The head of the phrase (V<sup>0</sup>), which is a verb, projects all the way up to the maximal projection (VP) through the intermediate projection (V'), in accordance with figure 2 above.

The tree structure below highlights how verbs can have one specifier and one complement. This information would allow us to account for simple sentences such as *Brian eats cake*.

<sup>&</sup>lt;sup>8</sup> Note that I have modified and simplified certain aspects of the syntax they propose. As an example, I use the term T(ense) instead of I(nflection) in the tree structures. This choice is based on the fact that this is how I have been taught to know the syntactic projections in my courses at the university.



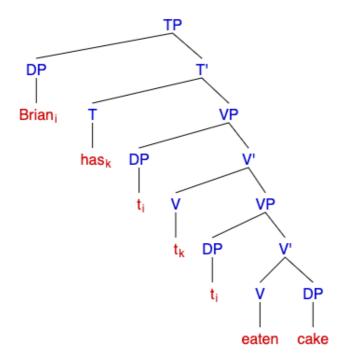
However, more complex sentences will lead to problems for this structure. For example, what happens if an auxiliary verb is added to the sentence above? Let us extend the sentence above to *Brian has eaten cake*. In this case, there simply will not be enough structure. As I have already mentioned, auxiliaries are types of verbs, and they take complements. In this sense, it is a recursion in the sense that the complement is a VP. However, this structure is not sufficient in English since auxiliaries also have other properties than main verbs. For example, auxiliaries only have finite forms (74), in contrast to main verbs which also have infinitive forms (73 and 75).

- (73) It would be cool to know how to play violin
- (74) \*It would be cool to can play violin
- (75) It would be cool to be able to play violin

The reason why a recursion is not sufficient is because auxiliary verbs require the following verb to be non-finite.

- (76) I can be sad
- (77) \*I can is sad
- (78) I can cry
- (79) \*I can cried

If an auxiliary verb itself cannot be non-finite, it has to be the case that an auxiliary cannot take another phrase headed by an auxiliary verb as a complement. The structure of the sentence *Brian has eaten cake* below evidence the importance of adding another projection to the structure, namely T(ense). This is the structure that covers tense and agreement. If we follow the structure in figure 2 above, the auxiliary verb constitutes a head, which will project up to TP via T'. However, as the trace in the structure indicate, *have* has moved to T from V. The tree structure below thus shows a recursive VP, but the fact that only one of them is finite shows tense and agreement marking, which demonstrate there is a single, non-recursive TP to which verbs can move. This counts for all verbs in Norwegian and a subset of verbs in English, as I will discuss later.



Here I want to stress that I am going to revise these types of structures later with vP and VP as my thesis will look more precisely at the verb and little v. However, at this point I find this structure with two VPs and TP adequate for explaining the clause structure.<sup>9</sup>

Nevertheless, an advantage with the structure above in *Brian has eaten cake*, is that it allows us to explain another difference between the syntactic behavior of auxiliary verbs and main verbs. This has to do with the position of main verbs and auxiliaries in the syntactic tree. This difference is manifested by the use of negation and adverbials.

- (80) I will not eat cake
- (81) \*I not will eat cake
- (82) \*I will eat not cake
- (83) I can often cry
- (84) \*I can cry often
- (85) \*I often can cry

As the examples in (80-85) illustrate, auxiliary verbs always precede negation and adverbials, whereas main verbs follow them.

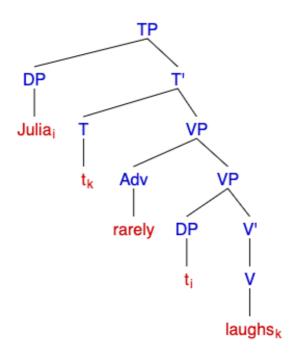
A question that arises in this context, is how main verbs relate to adverbs in terms of position in sentences without auxiliary verbs. Can we still argue for the need of TP in these cases?

<sup>&</sup>lt;sup>9</sup> I assume (following Sportiche 1998) that subjects move through every intermediate [Spec, VP] as the traces in the tree show, but this is not crucial for analyzing the behavior of the auxiliary verbs.

<sup>&</sup>lt;sup>10</sup> I assume for the present that non-finite inflection (like *-en* in *Brian has eaten cake*) is simply generated on V, but this assumption will be revised later in the Harwood system with pieces of inflection are in the heads of the ModP, PerfP, ProgP and VoiceP projections.

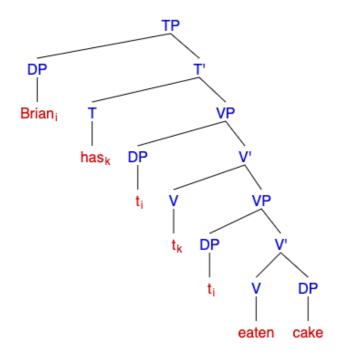
- (86) Julia rarely laughs
- (87) The children often sing Christmas songs
- (88) The president often spoke

The examples in (86-88) have in common that they do not contain any auxiliary verb. Each sentence contains a finite main verb and an adverbial. Yet, they all have in common that the main verbs still precede the adverbs even though there are no auxiliaries in the sentences. TP is nevertheless necessary since the verbs contain information about tense and agreement. The fact that main verbs follow adverbs testifies that tense lowers down to the main verbs, and that it is not main verbs that raise up to T:



If it had been the case that the main verbs raise up to T, the verbs would precede the adverbs in the word order. Thus, it seems that there is only a subset of verbs that can precede adverbs in English. These verbs are verbs that take VPs as complements, which we have so far identified as auxiliary verbs.

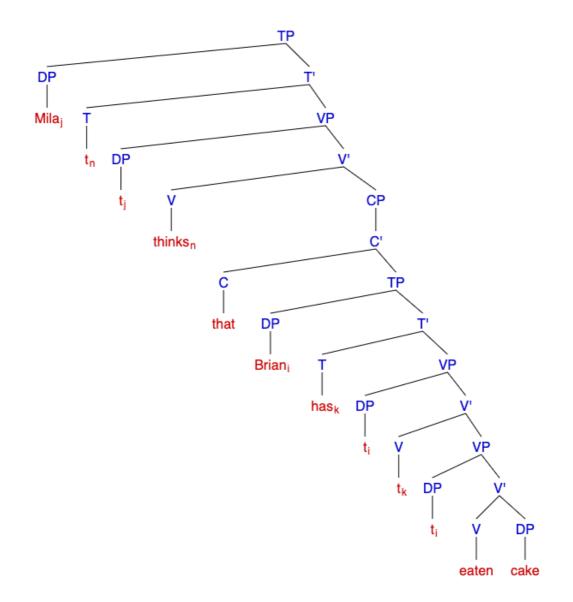
A problem with the structure so far is to account for movement. In the structure above, the subject is in the position of specifier of TP (henceforth <Spec, VP>), while the object is in the complement of VP. This suggests that the subject, Brian, is an argument of the auxiliary verb and not the main verb *eat*. That is not the case. The subject is selected by the main verb *eat*, but this would immediately lead to a problem with the word order for a declarative sentence: *\*Can Brian eat cake*. This problem is solved by a relationship between the auxiliary verb and the subject. This is clear by the utilization of the auxiliary verb *have*. This explains why we can correctly create sentences such as *we have eaten/he has eaten*, and likewise the ungrammaticality of sentences such as *\*we has eaten/\*he have eaten*. Thus, there is some kind of relationship between the subject and T, as I mentioned above. Moreover, it seems what is selected by the T is required to be in the specifier of TP and not VP. In other words, the subject moves from <Spec, VP> to <Spec, TP>, leaving a *t(race)* in the syntactic tree.



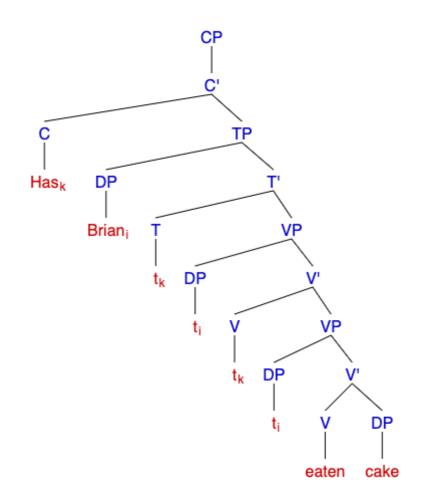
The purpose of the trace in the syntactic tree is important to signal that the moving element is a copy. In this context, it is important that only one of the copies is pronounced and that is the copy that is highest in the structure. Until this point, we have established that the subject is chosen by the verb in the verb projection, but that it must move to <spec, TP> to enter into an agreement relationship with T. In this position, the subject agrees with T with respect to tense and agreement.

The structure so far with TP-VP seems to work well with root clauses. However, what happens in more complex sentences, such as embedded clauses? For this purpose, I will expand the sentence to *Mila thinks [that] Brian has eaten cake*<sup>11</sup>. In this case, *that* introduces the subordinate clause *Brian has eaten cake*. This tells us what type of clause is being introduced – a declarative embedded clause. In comparison, the sentence *Mila wondered if Brian has eaten cake* initiates an interrogative embedded clause due to the appearance of *if*. Elements like *that* and *if* (and *for* and *whether*) are called complementizers (C) and connect structures together, embedding one clause inside of another (Carnie, 2012, p. 53). They are further seen as a functional category and thus have their own structure in line with TP and VP where C projects up to CP via C':

<sup>&</sup>lt;sup>11</sup> *That* does not necessarily need to be expressed, which is why I have it in brackets. Nevertheless, it is still there in the structure.



As the tree structure above illustrates, C takes TP as a complement. Notice also how the specifier of C is empty in this structure. An advantage with the C-projection is that it can host a landing site in its specifier position. In fact, this is what is happening in WH-movements and subject-verb-inversion (also known as T-to-C movement). As I(nversion) is one of the properties of NICE, I will illustrate T-to-C movement in the syntactic tree.



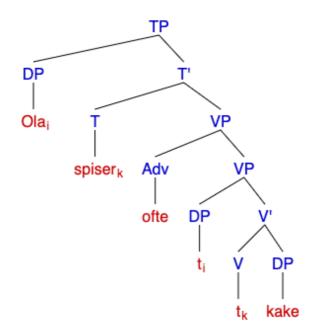
From the T-projection and below the tree structure above looks identical to the phrase *Brian has eaten cake*, whose syntactic tree we have already seen. However, an important difference from these two structures, is that the one above has a C-projection which host the verb *has*. Thus, *has* has moved from T to C, and in doing so, it has inverted with the subject leaving the interrogative sentence *Has Brian eaten cake*? Due to its use as a landing site for movement in interrogative phrases and in general T-to-C movement which allows for subject-verb-inversion, I assume that CP must be the maximum projection despite the fact that it is not always used, for example in simple declarative clauses like *Brian eats cake*.

So far, I have accounted for the syntactic clause structure in English. Now, in what way would Norwegian resemble or differ from English with respect to the clause structure I have just proposed? Being a Germanic language, Norwegian and English have common traits when it comes to lexicon and syntax, for example similar words and SVO-structure. Nevertheless, they are far from the same language. Consequently, some things are particularly different between the two. First, Norwegian is known as a V2 language, meaning the verb is always in second position in declarative main clauses. Immediately, this differs from English in with respect to the verb's position in relation to adverbs. Recall that the adverb precedes main verbs in English (but not auxiliary verbs). (89) and (90) demonstrate how verbs and adverbs are positioned in Norwegian.

(89)	Ola	spiser	ofte	kake
	Ola	eat.PRES	often	cake
	'Ola often eats cake'			

(90)	Ola	vil	sjeldent	spise	kake
	Ola	will.PRES	rarely	eat.INF	cake
"Ola will rarely eat cake"					

Like English, Norwegian verbs which translate English auxiliaries and take VP complements precede adverbs. However, Norwegian differs from English in that main verbs precede adverbs in simple sentences without auxiliaries. This proves that verbs have different structures and positions in Norwegian syntax than in English. Ultimately, this deals with whether the verb moves up to get tense, or whether tense hops down to the verb, which is referred to *affix hopping vs verb raising hypothesis* in literature (Harwood, 2014). In English, I have already shown evidence that tense must hop down to the verb. This is the only way to explain why the adverbial precedes the main verb in word order, and why an adverbial can intervene between an auxiliary verb and a main verb. On the contrary, the verb comes before the adverbial in the Norwegian word order. This testifies that the verb has to move upwards to get tense, i.e., verb raising.



In this sense, Norwegian and English verb morphology differs in how verb movements occur. All finite verbs move up to T in Norwegian, while the affix is lowered to the verb in English except from a subset of verbs. If we now return to the NICE properties, this might explain the difference between Norwegian and English with respect to the properties.

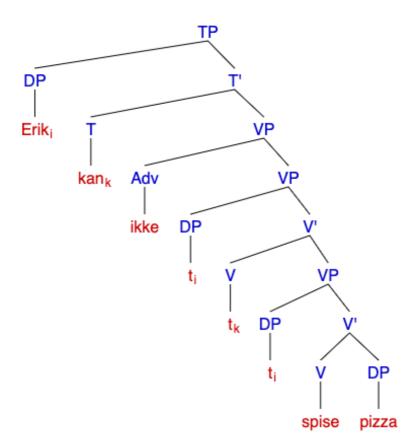
Until this point, I have argued for a common sentence structure in both English and Norwegian. As the layout proposed, they differ with respect to verb movement. To go back to the NICE properties, a question might be how these syntactic structural differences can explain the differences of how English and Norwegian relate to the NICE properties. As I have already stated (following Hauge 2003), only English auxiliary verbs have NICE properties, whereas English verbs that are not auxiliaries do not have any of the properties. On the other hand, Norwegian verbs do not only limit themselves to auxiliary verbs when it comes to the NICE properties. All kinds of verbs seem to have the N, I and E properties in Norwegian (see section 2.2.).

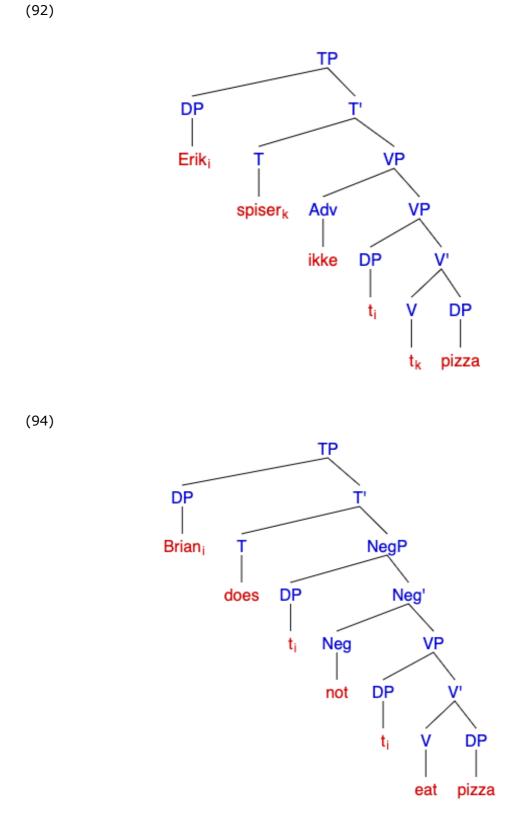
Let us start chronologically with the property of N(egation). The sentences below highlight how Norwegian and English verbs are positioned differently in sentences with negation:

(91)	Erik	kan	ikke	spise	pizza
	Erik	can.PRES	not	eat.INF	pizza
	`Erik c	an't eat pizza'	,		
(92)	Erik	spiser	ikke	pizza	
	Erik	eat.PRES	not	pizza	
	`Erik c	loesn't eat piz	za'		
	"Erik does not eat pizza"				
(93)	*Brad eats not pizza				
(94)	Brad o	doesn't eat piz	za		

Syntactic trees of the examples above would look like below. The ungrammatical example is not illustrated as it is difficult to draw a tree structure for an ungrammatical sentence.

(91)





The syntactic trees of sentence (91)-(94) reveal how Norwegian and English verbs behave differently in the syntactic spine. The verbs are placed in different positions related to the negators *not* and *ikke* (not). As tree structure (91) and (92) show, both Norwegian auxiliaries and main verbs can precede the negator *ikke*. In both cases, the

finite verb is in T and take NegP as a complement. The selection for T in Norwegian does not discriminate whether the verb is an auxiliary or not, as long as it is finite.

On the contrary, English only allows for auxiliaries to precede the negator *not*. In sentence (93), where a main verb precedes the negator, the sentence becomes ungrammatical. Instead, the sentence needs to insert a dummy *do* to save the grammaticality (94). Note that in (94), the dummy *do* is inserted directly into T to save the grammaticality of the sentence, follwing Haegeman and Guéron (1999). This is however an assumption that I will partially revisit later in this thesis.

In this regard, one might ask why all Norwegian finite verbs have the N(egation) property, but only a subset of English verbs do. A common feature for all three cases – in both English and Norwegian – is that the verb has to be in T. Moreover, we have already established that all Norwegian finite verbs move from V to T (see tree structures of (91) and (92)), while English is more restrictive when it comes to verb movement. In English, only auxiliaries move to T (see tree structure of (94)), while other verbs remain in situ and receive tense from affix hopping (see tree structure of (86)). In other words, it seems that the property of N(egation) requires the verb to be able to move to T. As English only allow for auxiliary verbs to move to T, but Norwegian allows for all finite verbs to move to T, it is plausible that moving to T is a prerequisite for the property of N(egation).

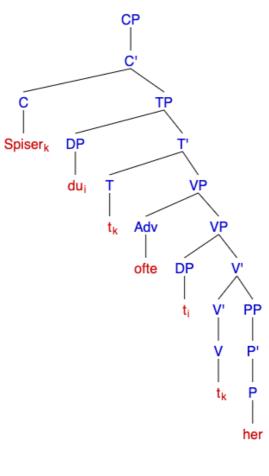
The next common property is I(nversion). As I demonstrated in the section of inversion in both languages, Norwegian and English also behave differently with respect to which verbs can invert and which cannot. Norwegian allows for all finite verbs to invert with the subject – both auxiliary verbs and verbs that are not auxiliaries – while English only allows for auxiliary verbs to inverse with the subject. For example, take a look at the following sentences:

(95)	Spiser	du	ofte	her?	
	Eat.PRES	you	often	here?	
	'Do you eat o	often he	ere?'		
(96)	Kan	du	ringe		meg?
	Can.PRES	you	call.IN	IF	me?
	'Can you call me?'				

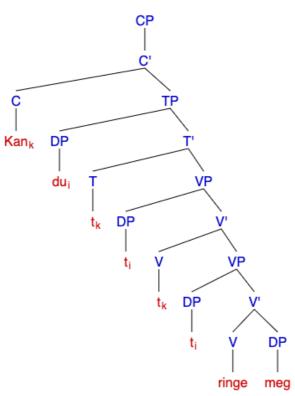
- (97) Do you often eat here?
- (98) \*Eat you often here?

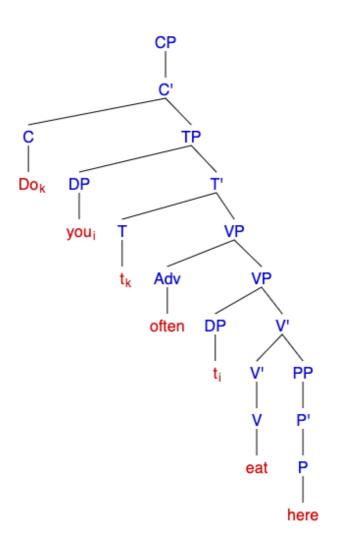
Transferred to a syntactic tree structure, sentence (95)-(97) would look like this.

(95)



(96)





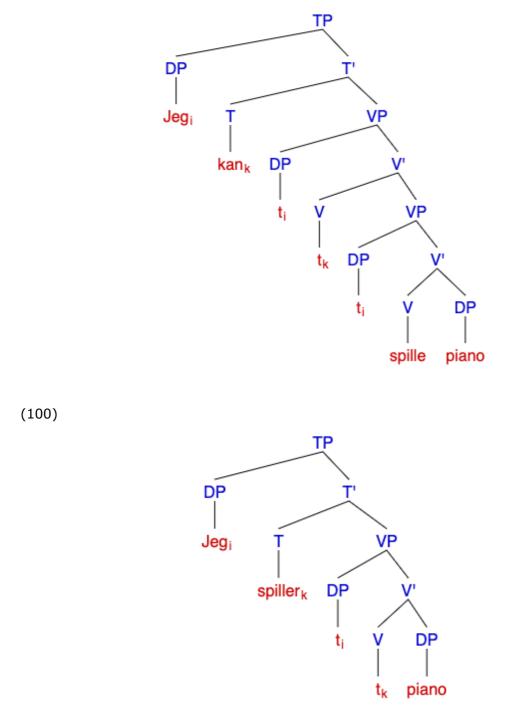
Again, as was the case with negation, verb movement seems to play a crucial role in inversion as well. Since Norwegian finite verbs must move to T, the verbs in both sentences (95) and (96) are in T, which allow them to carry out T-to-C movement. In English, only auxiliary verbs can move to T, while main verbs have to remain in situ in V. Consequently, sentence (97) is grammatical, while sentence (98) is not. In other words, it seems that verb movement from V to T is a prerequisite for the property of I(nversion) as well, since inversion is a result of T-to-C movement.

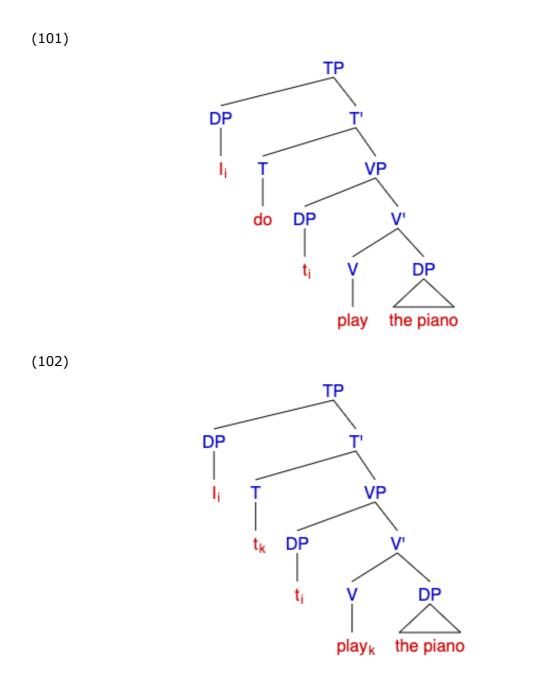
The final property English and Norwegian have in common is the one of E(mphasis). Recall that Norwegian allows emphatic stress for focus purposes on both verbs that are auxiliaries (99) and verbs that are main verbs (100), whereas English only allows for emphatic stress on the former (101):

- (99) Jeg *kan* spille piano
- (100) Jeg *spiller* piano
- (101) I do play the piano
- (102) #I play the piano

(97)

Tree structures of (99-102) are illustrated below. (99)





Like the shared properties if N(egation) and I(nversion), it seems that verb movement and the verb's position in the syntactic structure are decisive for whether a verb can be emphasized or not. The examples from both Norwegian and English show us that only verbs that can move to T are able to produce emphatic stress, whereas verbs that remain in situ in V cannot. That explains why (99-101) can produce emphatic stress, since the verbs move to T, while (102) cannot, since it is a case of affix-lowering. Thus, once again it seems like verb movement from V to T is a prerequisite for the property of E(mphasis).

In short, all Norwegian finite verbs move to T, but only a subset of English finite verbs do and those are more or less the ones that take VP complements, and moving to T is a prerequisite for the N, I and E properties. This explains why only some English verbs have the N, I, E properties and some do not, whereas all verbs in Norwegian have these properties.

On another note, it is interesting that Norwegian finite verbs have all the NICE properties except for C(ode). This is an interesting area to further explore. Why is it that English consistently shows the NICE properties with only auxiliary verbs, but Norwegian is not consistent in what properties the verbs have? Based on the NICE properties, it is clear that auxiliary verbs constitute their own category in English as all of the auxiliary verbs differ from main verbs in that they have all of the NICE properties. In Norwegian, on the other hand, it is not immediately clear from the NICE properties that auxiliary verbs constitute their own category share the same properties. There is one place where Norwegian verbs can be distinguished, however – in the property of C(ode). For example, in sentences containing ellipsis, all Norwegian finite verbs suddenly do not have the property of C(ode), as one might would expect based on the NICE properties.

(103)	*Han	reparerte	bilen	sin, reparerte	du?			
	He	repair.PAST	car.DEF	his, repair.PAST	you?			
	'He repaired his car, did you?'							
(104)	Han	reparerte	bilen	sin, gjorde du?				
	He	repair.PAST	car.DEF	his, do.PAST you?				
	'He repaired his car, did you?'							

Example (103) and (104) demonstrate how the use of a finite main verb leaves the sentence ungrammatical in an ellipsis construction, while the appearance of gjøre (do) does not. Furthermore, these examples with ellipsis demonstrate that the I(nversion) property, which Norwegian main verbs normally have (see 2.2.2.), disappears in constructions when the C(ode) property is involved. Nevertheless, some verbs can appear in such questions.

(105)	Ola synger	vakkert, og	det gjør	du d	også.					
	Ola sing.PRES	beautiful, and	d so do.PRES	you	too.					
	'Ola sings beautiful, and so do you.'									
(106)	*Ola synger	vakkert, og	det synge	r du	også.					
	Ola sing.PRES	beautiful, and	autiful, and so sing.PRES yo							
	'Ola sings beautiful, and so do you.'									
(107)	Kari kjenner	Ola, og det	gjør	jeg	også.					
	Kari know.PRES	Ola, and so	do.PRES	Ι	too.					
	'Kari knows Ola, and so do I.'									
(108)	*Kari kjenner	Ola, og det	kjenner	jeg	også.					
	Kari know.PRES	Ola, and so	know.PRES	I	too.					
	'Kari knows Ola, and so do I.'									
(109)	Jeg sang	en sang,	og det gjord	е	læreren	også.				
	I sing.PAST	a song,	and so do.PA	AST	teacher.DEF	too.				
	'I sang a song, and so did the teacher'									
(110)	Ruben synger	nå, gjør	han	ikke?						
	Ruben sing.PRES	now, do.PR	ES he	not?						
`Ruben sings now, doesn't he?'										
(111)	*Ruben syng	er nå,	synger	han	ikke?					
	-	PRES now,	sing.PRES	he	not?					
	`Ruben sings now, doesn't he?									

This provides a mysterious corner of Norwegian; Norwegian does not seem to care about auxiliary verbs until this point. Suddenly, there does seem to be a separate category of auxiliary verbs in Norwegian. Contrary to what it looks like so far, it seems that Norwegian, like English, has a phenomenon of do-support – namely *gjøre*-support. Although it is not as visible and frequent as it is in English, which uses *do*-support in negation and interrogative clauses, it seems that *gjøre*-support still exists in some cases, such as in example (103-111) above. Why do some verbs suddenly lose the I(nversion) property when the C(ode) property is involved? That is to say, you cannot say \**Reparerte du?* ('repaired you?') And why does *gjøre*-support (*do*-support), which otherwise seems not to exist in Norwegian, appear in such cases?

The property of C(ode) shows that things are more complicated than what it might appear on the surface. In order to understand what is going on with respect to verbs in Norwegian and the complexity of the property of C(ode), we will need to take a closer look at the clause structure and what is happening between VP and TP.

## 3 Analysis of the auxiliary verb

Previous section gave an overview of the clause structure and verb movements in Norwegian and English. This overview is not sufficient to show details of auxiliary verbs or why Norwegian has this mysterious code property, as I see it. Therefore, this section will look what is between VP and TP in the structure and thus the category of v in more detail. This is because the complexity of auxiliary verbs needs to be examined in a more detailed manner in order to uncover its true nature. This includes VP shells and vP, I argue. To account for auxiliary verbs, I will use the Norwegian auxiliaries *gjøre* (do) and *bli* (be), and their English equivalents *do* and *be*.<sup>12</sup>

#### 3.1 Do auxiliary verbs constitute a separate category for themselves?

At this point I have outlined how certain verbs seem to behave differently in both Norwegian and English. A key question within syntax and clause structure, especially within the x-bar theory that has gradually become widespread, is whether these "different" verbs constitute a separate category or not. Do auxiliary verbs form a separate category, or do they belong to the category V, to which other verbs belong?

In English this is a well-discussed topic as there exists a lot of literature and research on this topic since decades (Ross, 1969; Huddlestone, 1976; Akmajian et al., 1979; Palmer, 1987). However, in other languages this is not as much researched and consequently it is a less clear topic. There is some research on this in Norwegian as well (Lødrup, 1990), but far from the same degree as there is in English. Other Scandinavian languages also debate this topic (Platzack, 2012; Houser et al., 2011).

According to Houser et al. (2011, p. 200), the traditional view in many languages is that auxiliary verbs constitute their own category distinct from main verbs. Moreover, auxiliaries should be treated as functional heads, whereupon English auxiliaries are divided into four different categories: modals (Mod), the perfect *have* (Perf), the progressive *be* (Prog), and the passive *be* (Pass) (Houser et al., 2011, p. 200). Houser et al. argue these four functional heads are located above v and below T, and they all differ from main verbs in that they occur above both v and V (2011, p. 200). As I see it, we also need to account for the fact that a clause can contain several auxiliaries. In the section that follows, I will do the latter, in addition to look in more detail at the latter argument by Houser et al. (2011).

#### 3.2 A more thorough analysis of VP and TP

In section 2.3.1, I introduced the model of syntax I am assuming, X-bar theory, and explained the clause structure in English and Norwegian in that framework. Clause structure and the discussion of what it contains and does not contain is a controversial topic within the field of syntax. Some claim there is more between TP and VP, while others claim there is not. It is in this vacuum that several phenomena arise and consequently disagreement about how to account for them. In this section, I will analyze the fine details of VP and TP and what is between them. A thorough description of the fine details of VP is necessary for uncovering the details of auxiliaries and verb

<sup>&</sup>lt;sup>12</sup> I want to stress that *bli* is the passive auxiliary use of *be* in English in this case.

movement in the clausal spine, which will later be central in the discussion and analysis of auxiliaries which this thesis will cover in-depth. This is essential for uncovering whether auxiliary verbs form a separate category distinct from V, v and T.

#### $3.2.1\ \text{VP}$ and vP

As Gelderen (2013, p. 43) points out, phrases have a grammatical function in a clause as well as a semantic role. Phrases are those we have seen are determined by heads by which they are projected up to, such as VPs, NPs, PPs, etc. The same applies to vP, also called little v, which differs from VP. These two categories are relevant for when I will later explain how English and Norwegian relate differently to the properties that are N, I and E from NICE.

The status and need for a little v are disputed in the literature. The vP domain is traditionally assumed to constitute "a discrete unit of structure separate from the temporal domain which is typically comprised of tense and aspect", according to Aelbrecht and Harwood (2014, p. 81). The relevance of discussing whether there is a category little v or not is, in my opinion, important in order to account for auxiliary verbs in the clause structure. This implies where they originate and how they move. I will return to this in section 3.2.2 and 3.2.3 when I analyze Norwegian *do*-support and British English *do*.

To argue for little v, I will assume Harwood's (2014) type of model. In connection with his discussion of auxiliary raising versus affix hopping, he problematizes the analysis of auxiliary raising with the sentence *He could have been being hassled*, which contains several auxiliaries (figure 3).

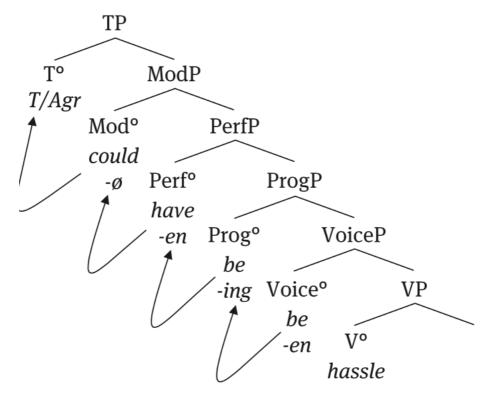


Figure 3: Representation of auxiliary movements (from Harwood, 2014, p. 305)

The status and need for TP and VP are already recognized. TP is where verbs get their tense and agreement, while VP is where main verbs originate. The model above also presents several projections between TP and VP in which auxiliary verbs are placed. These are the four categories of which English auxiliaries consist, which are ModP, PerfP, ProgP and VoiceP (Houser et al., 2011, p. 200). Yet, this model is not sufficient to justify auxiliary raising, according to Harwood (2014, pp. 305-306). The reason for that is the fact that the auxiliary verbs do not have a place to go when they raise, which leads to a breach of the General Head Constraint (GHC). As Aelbrecht and Harwood (2014, p. 71) put it, auxiliary verbs would inadvertently raise into higher aspectual positions, in which heads are already filled by either a higher auxiliary, or a trace of an auxiliary, which ultimately causes a locality violation. This is illustrated above in figure 3.

Therefore, to avoid a locality violation, Harwood proposes that each projection has a vP shell on top of them of which the auxiliary selecting that particular aspectual form is base generated (2014, p. 306). This split into two distinct projections with an outer shell and an inner core, is known as VP-shell (or split VP) analysis (Radford, 2009, p. 292).

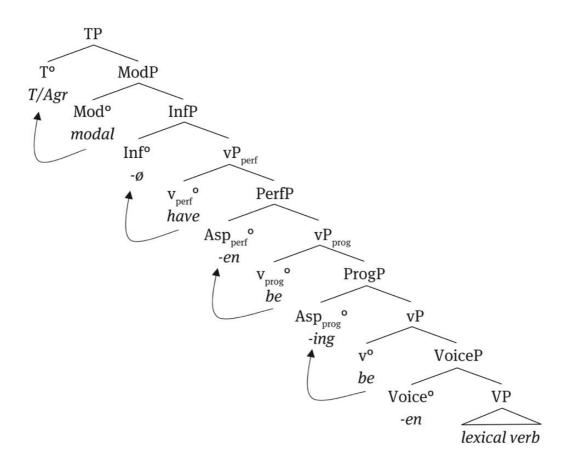


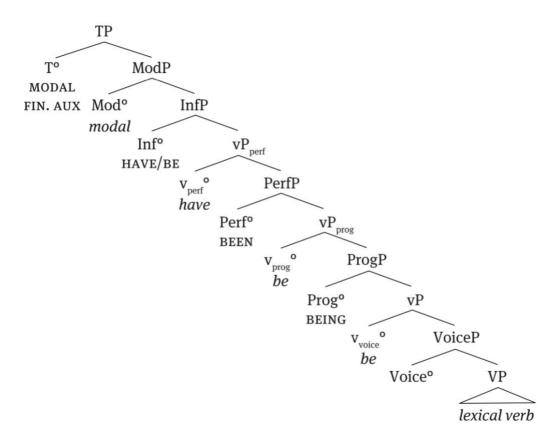
Figure 4: Revised structure of auxiliary movement (from Harwood, 2014, p. 307)

A significant difference in figure 4 from figure 3, is that each projection has its own vP shell, like a paired layering, that can provide an available landing site for lower auxiliaries to raise into (Harwood, 2014, p. 308). This does not break with the GHC similar to Figure 3, since the higher projection of the VP shell is headed by the auxiliary verb, while the lower projection licenses the inflectional form of the following verb (Aelbrecht and Harwood, 2014, p. 70).

On the other side, Aelbrecht and Harwood (2014, p. 71) recognize the critical questions that accompany the existence of VP shells. Among other things, it is problematic that these heads have no semantic motivation, but they say the need to avoid locality violation outweighs that argument nevertheless.

In 2009, Radford came up with several arguments to syntactically justify for a split VPshell, which supports Aelbrecht and Harwood's (2014) view. On the basis of transitive ergative structures, two-complement transitive structures, unaccusative structures and passive structures, Radford claims that "all transitive and intransitive Verb Phrases alike have a shell structure in which the verb raises from V to v, with agent and experiencer external arguments (and expletive subjects) originating in spec-v, and all other arguments originating within VP" (2009, p. 314).

Ultimately, Harwood (2014, p. 311) states that the structure above makes possible the following potential distribution of auxiliaries in English:



*Figure 5: Distribution of auxiliaries in English tree structure. From Harwood (2014, p. 311).* 

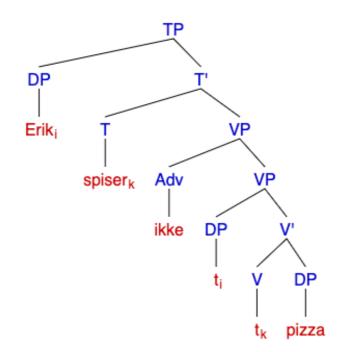
The labels of the projections in the structure, whether they are called little vP or AuxP, are less important. Instead, what is important, I think, is the positions of the projections themselves and further how different auxiliary verbs relate to them. To exemplify, I will later use the Norwegian auxiliary verbs *bli* (be) and *gjøre* (do), and look at their passive distribution, which corresponds to VoiceP in figure 5.

#### 3.2.2 Gjøre-support

The Norwegian translation of the verb *do* is *gjøre*, thus the Norwegian equivalent of English *do*-support is *gjøre*-support. As previously mentioned, this kind of support does not appear as frequently in Norwegian as in English, according to Hauge (2003, p. 59). This is shown by sentences such as (91) and (95), repeated in (112) and (113).

- (112) Erik spiser ikke pizza. Erik eat.PRES not pizza. `Erik doesn't eat pizza.'
  (113) Spiser du ofte I
- (113) Spiser du ofte her? Eat.PRES you often here? 'Do you often eat here?'

These two examples demonstrate how Norwegian differ from English with respect to verb movement in that the Norwegian main verbs have moved from V to T (112), and then to C in (113). This is further demonstrated in the tree structure of (112).



As the gloss translation of (112) and (113) reveal, English does not move main verbs from V to T. Instead they have to insert *do*-support as it is a required operation to bear tense and agreement, and thus save the grammaticality of the sentence (Kim, 2002, p. 1054). Negation blocks affix-hopping from T onto V in (114), whereas the tense affix in T has moved to C in (115).

- (114) Erik does not eat pizza.
- (115) Do you often eat here?

In other words, the lower frequency of Norwegian *gjøre*-support as opposed to English *do*-support is a result of the fact that Norwegian main verbs move from their original position. Therefore, Norwegian sentences does not need to be saved to the same extent as English since their main verbs can move to receive tense and agreement. In fact,

Platzack claims English *do*-support does not have a counterpart in neither Swedish, Danish nor Norwegian, where *göra/gøre/gjøre* are the equivalents of *do* (2012, p. 1).

The latter point by Platzack raises the question of why *do* is translated as *gjøre*. If *do* is to be translated as *gjøre*, there must exist some kind of evidence in which *gjøre* has a dissimilar characteristic like the case of English *do*. In this case, look at the sentences in (116) - (118) compared to the examples provided by Houser et al. (2011, p. 209 and 203), which have been translated from Danish into Norwegian by me (119) - (120):

(116)	Jeg I	gjorde do.PA	e ST		dårlig bad	-		- / -		
	`I ma	de a ba					-			
(117)		gjorde			god	innsat	s.			
. ,	I	do.PA	ST	а	good	effort.				
	`I mae	de a go	od effor	t.′	-					
(118)	Jeg	gjør		leksen	е	mine.				
	I	do.PR	ES	homev	vork	my.				
	`I′m d	loing m								
(119)	Jaspe	r lovet			å vas	ke	bilen		og	vaske
	Jaspe	r promi							and	wash.INF
	bilen		gjorde	2	han	så	sanne	lig.		
		EF								
	`Jaspe	er prom	ised to	wash tł	ne car,	and he	(indee	d) was	hed the	car.'
(120)	Mona	og	Jasper	<sup>-</sup> vasket		bilen,		eller		
	Mona	and	•					or		
	retter	e	sagt	gjorde	1	Mona	det.			
	rathe			do.PAS						
	`Mona	and Ja	sper wa	ashed t	he car,	or rath	er Mon	a did.'		

What the examples in (116-120) show us, is that *gjøre* has different characteristics and properties, just like we expected it to in order to justify its translation of English *do*. In (116-118), it serves as a main verb, whereas in (119) and (120) it serves as an auxiliary verb. In this regard, one might wonder why *gjøre* does appear in (119) and (120). The NICE properties applied to Norwegian showed that Norwegian does not behave like English with respect to auxiliary verbs and *do*-support, thus the appearance of *gjøre* in (119) and (120) needs to be explained for, which is what I will go on to do.

In the literature on *gjøre*, a lot of attention has been given to the discussion (and disagreements) that deal with which syntactic label to give *gjøre*. The latter point is addressed by Houser (et al., 2011) based on published articles, including Platzack (2012). Houser et al. (2011) address the status of Danish *gøre*, which they refer to as a defective auxiliary verb as it cannot be treated as any of V, v or T, but must be treated separately from all of these. In the following paragraphs, I will not focus on what syntactic label they are arguing for *gøre* to be classified as, but rather on summarizing and discussing their arguments about *gøre*. This implies where in the syntactic tree structure *gøre* is located, which I believe Houser et al. (2011) do not have convincing arguments about. Houser et al. (2011) emphasize that *gøre* does have auxiliary-like properties, but the key question in this regard is whether that means that it has to be given a category separate from all of V, v and T, which I claim Houser et al. (2011) have weak arguments for. As a counterproposal, I would like to exemplify how Norwegian *gjøre* seems to be a little v, following the lines of Platzack (2012). To justify this, I will

use data points that enable an analysis on which *gjøre* is in complementary distribution with the auxiliary *bli* (be) in the position which Harwood's (2014, p. 308) structure refers to as VoiceP.

An important remark is that Houser et al. (2011) analyze Danish *gøre*, while I focus on the Norwegian cognate *gjøre*. Although Norwegian and Danish are closely related, they are not completely identical, which may affect the syntax. Nevertheless, I will use Danish data points from Houser et al. (2011) to highlight that their arguments are not strong for claiming that *gjøre* must be treated separately both from little v and from other auxiliaries. I think this is wrong, as it indeed can be treated as  $v_{voice}$  in Harwood's (2014) system.

To clarify the difference between the auxiliary analysis and v analysis, Houser et al. (2011) address (the lack) of ellipsis (*det*) with non-finite *do*. According to Houser et al. (2011), this testifies that *gøre* is an auxiliary verb, to which they refer to their data points (26-27), which is reproduced in (121-122):

•				•	•							
(121	)	Den	gamle	e loven	blev		[fulgt	],	men	det b	iver	
		The	old	law	becom	ne.PAST	follov	v.PART	but	that b	ecome.	.PRES
		den	nye	ikke	(*gjor	t). <sup>13</sup>						
		the	new	not	do.PAI	RT						
		`The c	old law	was adl	hered to	o, but t	he new	one is	not bei	ing adh	ered to	o′
(122	)	De	håber		også,	at	hele	retssy	stemet	komm	er	
		They	hope	.PRES	also	that	whole	court.s	ystem	come.	PRES	
		til	at fun	igere		ordent	ligt,	sålede	s at	loven		også
		to	to fun	ction.IN	١F	proper	ly	SO	that	law.Dl	ΞF	also
		reelt		bliver		[fulgt]	_	det g	ðr	den	ikke	nu.14
		in-rea	lity	becom	ne.PRES	5 follow	.PART	DET de	o.PRES	it	not	now.
		`They	are als	o hopin	g that t	he enti	re lega	l syster	n will s	tart fur	nctionir	ng so
		-		will act	-		-	-				-

In other words, a part of their argument to treat *gøre* as an auxiliary verb seems to be similar to saying that if *gøre* was very low in the structure and close to VP, as it is in a little v analysis, you might expect that you should be able to get strings like (123):

(123)	*Han	trodde	5	at	han	skulle		bli	
	He	think.	PAST	that	he	will.PA	ST	be.FUT	
	forfrer	nmet,	men	han	har		ikke	blitt	gjort.
	promo	oted,	but	he	have.	PRES	not	be.PERF	do.PART
	'He th	ought h	ne woul	d be pr	omoted	l, but h	e has n	ot been'	

Under the little v analysis, *gjøre* should be able to come after auxiliary verb *bli*. The ungrammaticality of (123) shows that it cannot, however, so therefore *gjøre* must be a little higher in the structure as Houser et al. (2011) see it.

Nevertheless, Houser et al. (2011, p. 224) do admit it is hard to tell auxiliary and v analyses of *gøre* apart, even though they claim to prove a difference:

<sup>&</sup>lt;sup>13</sup> This is a Danish example from Houser et al. (2011, p. 221).

<sup>&</sup>lt;sup>14</sup> This is a Danish example from Houser et al. (2011, p. 222).

One can tell that it is hard to distinguish between the two analyses of *gøre*, that is, the [little] v analysis and the auxiliary analysis. [I]n the v analysis, gøre occurs immediately below the lowest auxiliary; on the auxiliary analysis, gøre is the lowest auxiliary. We conclude, nonetheless, that it is possible to tell the difference. The ban on nonfinite gøre under perfect være and passive blive mimics gaps in the distribution of other auxiliaries, and this similarity is captured by the auxiliary analysis, which accounts for all such gaps in terms of subcategorization.

Moreover, in the section "*Gøre* is not a little v", Houser et al. (2011) admit that *gøre* cannot be excluded from being a little v, even though they believe it is more unlikely. Theoretically it is still possible that *gøre* does not show the same properties as other light verbs simply because Danish is different from other languages in that members of v are either null or realized as *gøre* (Houser et al., 2011, p. 212).

I will rather offer another point of view on these analyzes. The way Houser et al. (2011, pp. 222-223) accounted for *gøre* in these cases is that it must belong to the auxiliary hierarchy because it is subcategorized for by modals and perfect *have*, but not by *være* or *blive*. The data points in (121) and (122), however, do not hold up if we analyze the corresponding Norwegian sentence (124):

(124)	*De	håper		også,	at	hele	rettss	ystemet	
	They	hope.I	PRES	also	the	whole	court.	system.DEF	
	kommer		til å fu	ingere		orden	tlig,	slik	
	come.PRES		to fun	ction.IN	١F	prope	rly	SO	
	at lover	l	også	reelt		blir		fulgt –	det
	that law.D	DEF	also	in.rea	lity	becom	ne.PRES	5 follow.PART	DET
	gjør	den	ikke	nå.					
	do.PRES	it	not	now.					
	'They are als	so hopin	g that i	the ent	ire lega	I syste	m will s	tart functionin	ig so
	that the law	will act	ually be	e adher	ed to –	that is	n't the	case now'	

As the asterisk mark notes, the similar use of *gjøre* does not work in Norwegian, at least according to my judgment. Instead, Norwegian has to use the auxiliary *bli* in this case:

(125)	De	håper	også	at	hele	rettss	ystemet	
	They	hope.PRES	also	the	whole	court.	system.DEF	
	komm	ner til å f	ungere		orden	tlig,	slik	
	come	.PRES to fui	nction.II	NF	prope	rly	SO	
	at	loven	også	reelt		blir		fulgt -
	that	law.DEF	also	in.rea	ality	becon	ne.PRES	follow.PART
	det	blir	den	ikke	nå.			
	DET	be.PRES	it	not	now			
	`They	are also hopi	ng that	the ent	ire lega	ıl syste	m will start fu	inctioning so
	that t	he law will ac	tually be	e adher	ed to -	that is	n't the case n	ow'

This example offers us another perspective than the one of Houser et al. (2011), namely that *gjøre* and *bli* are in a complementary distribution. This accounts for why we do not see *gjøre* and *bli* together, since they are fighting for the same position in VoiceP (Visualized in figure 6 below). Hence, the appearance of one explains the absence of the other, which gives another perspective rather than just stating that one must appear higher in the structure than the other.

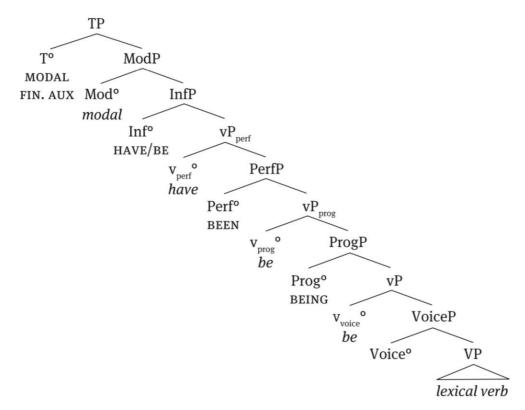


Figure 6: Distribution of auxiliaries in English. From Harwood (2014, p. 308).

The passive auxiliaries are distributed in the position which this model refers to as VoiceP, which is located right above VP. Thus, this is where you find *gjøre* and *bli* in (124) and (125).

The labels of the projections in the structure, whether they are called little vP or AuxP, is not important in my opinion. Instead, I think the positions of the projections themselves and how different auxiliary verbs relate to them are important. The structural arguments of this type I have been talking of is what Harwood identify with little vP. Thus, there is a sense in which the label which Houser et al. (2011) discuss does not matter; what matters instead is this position that is just above VP, and a VP that is specified between active and passive. In this connection, *gjøre* seems to combine with an active VP, whereas *bli* combines with a passive VP:

(126)	Han He	sa say.P	AST	han he	skulle should		bli be.INF	forfremmet, promote.PART
	men	det	har		han	ikke	blitt	(*gjort)
	but	DET	have.F	RES	he	not	be.PART	do.PART
	/(*blit	tt	gjort)					
	be.	PART	do.PAF	RT				
	`He sa	id he v	vas goin	g to be	e promo	oted, bi	ut he hasn't.'	

(127)	a. Han sa he say.PAST	han blir he be.Pf	forfremmet, RES promote.PART	men han but he	
	•	forfremmet.	•	but ne	
	be.PRES not				
	'He said he gets p	promoted, bu	t he doesn't get prom	oted.'	
	b. Han sa	han blir	forfremmet,	men det	
	he say.PAST	he be.Pl	RES promote.PART	but DET	
	blir / (*gjør)	) han	ikke.		
	be.PRES do.PRE	ES he	not.		
	'He said he gets p	promoted, bu	t he won't be.' <sup>15</sup>		
(128)	a. Han sa	han forfre	emmer løytna	anten,	men
	he say.PAST	he prom	ote.PRES lieute	enant.DEF	but
	han forfremmer	ikke	løytnanten.		
	he promote.PRES	S not	lieutenant.DEF.		
	'He said he promo	otes the lieut	enant, but he doesn't	promote the	
	lieutenant.'				
	b. Han sa	han	forfemmer løytr	nanten,	men
	He say.PA	AST he	•	enant.DEF	but
	det gjør /	(*blir)	han ikke. <sup>16</sup>		
	DET do.PRES	be.PRES	he not.		
	'He said he promo	otes the lieut	enant, but he doesn't	do that.'	

Like the examples above demonstrate, *gjøre* does not work if *bli* is possible, and vice versa. *Gjøre* should only work when the sentence is active, like in (128b), while the equivalent sentence without *det* would use *bli* (127b). Again, this evidence that *gjøre* and *bli* are in complementary distribution. Interestingly, it is in this position British English *do* occurs as well as I will show in the next section.

### 3.2.3 British English do

In the last section I highlighted and discussed how the arguments of Houser et al. (2011) had weaknesses in excluding that *gjøre* is anything other than an auxiliary verb. Instead, I demonstrated how *gjøre* can be discussed to be in a complementary distribution with *bli* as a little v. Moreover, I have talked about how *gjøre*-support is a Norwegian equivalent of the phenomenon of *do*-support which is obligatory to maintain the order of English syntax of all varieties. In this section, I will present a variety of English, British English, and focus on its use of *do* which differs from the general use of *do* which includes all English varieties. This is exemplified in (129) and (130).

- (129) Isac should eat, and I should do, too.
- (130) Isac has eaten, and I have done, too.

At first glance, it is clear that the appearance of do in these cases is not the last resortdo. Both (129) and (130) have an auxiliary verb that bears the tense and agreement of the sentence, so there is no need for a do-support to save the grammaticality of the sentence. This is evident by the grammaticality of the equivalent sentences without do.

<sup>&</sup>lt;sup>15</sup> Even though *blir* is present tense, it often has a future interpretation in Norwegian. (*Han blir forfremmet* could be translated into English either as 'he is promoted' or 'he will be promoted'.)

<sup>&</sup>lt;sup>16</sup> In this case, many would find «det blir han ikke» acceptable. However, the reason why I marked it with an asterisk mark, is because "han" in these cases would refer to "løytnanten" and not the person who is actually doing the promoting.

- Isac should eat, and I should, too. (131)
- (132) Isac has eaten, and I have, too.

In fact, the latter two examples are preferred and more standard. Thus, (129) and (130) show that British English allows another use and distribution of do that is perceived as ungrammatical or syntactically unnatural by people who do not speak British English. According to Thoms (2011, p. 3), this British English *do*-construction appears at the edge of what seems to be a VP-ellipsis site after a modal or auxiliary verb. Furthermore, this do-construction does not have a lexical semantic meaning and can be used freely as we saw in the examples above, unlike the last resort-do (Thoms, 2011, p. 3). Consequently, this British English variety of do poses an empirical challenge to do-support, but Thoms claims that British English do is the same thing as standard English do-support nevertheless (2011, pp. 9-10). This comes forth in the paradigm in (133) below, which I will explain. I will not commit myself to whether this unification of British English do and standard English do is correct or not in this thesis, but it is however relevant to mention that Thoms (2011) makes that argument. Thoms (2011) argues that British English do is a little v, and this is what I will examine with the account of Norwegian gjøre in the background.

To account for do as a little v, Thoms (2011, pp. 9-10) presents a paradigm, from which I include selected examples in (133). The general point of the explanations Thoms accounts for in each example in paradigm (133), is that "v only moves to T if it is the closest verbal head that can check T's uninterpretable V-feature [...]" (Thoms, 2011, p. 9). In other words, v will only move to T when it is needed, which happens to be in cases where T and v are not adjacent and v is the closest verbal head to T.

(133) a. Rab sings The Wizard.

[TP subj [T' T [vP v [VP V]]]] T and v are adjacent: no v-movement, do does not appear

#### b. Rab does not sing The Wizard.

[TP subj [T' T [NegP not [vP v [VP V]]]]]

T and v are not adjacent as *not* intervenes: v has to raise to T, hence *do* appears

#### d. Which Black Sabbath Song does Rab sing?

[CP wh [C' C+T [TP subj [T' tT [vP v [VP V]]]]]] T and v are not adjacent as T has moved to C: v has to raise, hence do appears

#### e. Rab sings The Wizard and Morag does, too.

[TP subj [T' T [vP v [VP V]]]]

T and v are not adjacent as v in vP is within a deletion site: v has to raise to T, hence *do* appears

#### f. Rab is not singing/has not sung The Wizard.<sup>17</sup>

[TP subj [T' T [NegP not [AuxP be/have [vP v [VP V]]]]]] <sup>18</sup> T and v are not adjacent, but the auxiliary is closer, so the aux raises to T: do does not appear

<sup>&</sup>lt;sup>17</sup> I have changed the form of the verb from *sang* to *sung*, as this is the correct form in standard English. The former is probably from the dialect of Thoms (2011).

<sup>&</sup>lt;sup>18</sup> I want to emphasize that I assume what Thoms (2011) calls AuxP could be replaced by Harwood's vP-shells.

In these examples, *do* is pronounced when there is negation (b vs. a), or if ellipsis of vP (e) and T-to-C movement (d) prevent T from being adjacent to v (Thoms, 2011, p. 9). In the case of (f) where T and v are not adjacent, *do* is not pronounced because the auxiliary verb is closer to T, which means it raises to T and thus *do* is not needed.

Ultimately, after accounting for British English *do* and standard English *do*, Thoms surmise that "v only spells out as *do* when it is not adjacent to V at morphology; if v and V are adjacent at morphology, they spell out as the lexical verb V" (Thoms, 2011, p. 12). This is visible in the paradigm in (133), since in every case where *do* appears, it is not adjacent to V.

However, this emphasizes that it is not only the relation between v and T which is important, but also the one between v and V. The latter point is exemplified by the simple sentence in (134) which is provided by Thoms (2011, p. 11).

(134) What does Rab sing?

[CP What [C' C+T [TP Rab [T' t [vP v [VP sing]]]]]

The example in (134) is a case of T-to-C movement where *do* appears in C (Thoms, 2011, p. 11). Following the patterns of the adjacency from paradigm (133) above where v only moves to T when they are not adjacent, one would think in the case of (133) that T is satisfied as its complement is vP, hence there is no need for *do*-support. The appearance of C and the following T-to-C movement should nevertheless not affect the satisfaction of the selectional restriction on T, according to Thoms (2011, p. 11). British English *do* is helpful in this case, since it shows that *do* can appear in projections below T, for example in cases of VP-displacements (135) or pronunciation of extraneous *do* in British dialects (136), the latter of which Thoms (2011, p. 12) provides examples of:

- (135) a. Henry and Jane said they were going to eat a pizza and eat a pizza they did.
  - b. Henry and Jane they were going to eat a pizza and eat a pizza they have
- (136) a. Rab said he will win the race, and win the race he will do.
  - b. Rab said he was going to win the race, and win the race he has done.

These examples seem to cause problems for the account that dealt with adjacency between T and v. As Thoms (2011, p. 12) puts it: «if VP has been displaced, then vP should still be adjacent; if vP has been displaced, v will not be able to raise to T, unless it does so before vP is displaced, which would appear to be in violation of constraints on derivational economy». It is on the basis on this information of the adjacency between T and v, and between v and V that Thoms (2011, p. 12) surmises that the most relevant adjacency relation is between the latter. Furthermore, on this background he proposes that "v only spells out as do when it is not adjacent to V at morphology; if v and V are adjacent at morphology, they spell out as the lexical verb V", which is in line with paradigm (133) above, as well as the examples in (135) and (136).

If we now return to Norwegian and the case of gjøre, this is particularly interesting. I argue that gjøre shows quite a similar behaviour to British English do, which I, following Thoms (2011), believe is a spell out of a v head, specifically V<sub>voice</sub>. In this regard, VP topicalization is of peculiar interest.

- (137) Han sa han skulle spise brunosten, brown.cheese.DEF He say.PAST he would.PAST eat.INF ikke. men spise brunosten giorde han but eat.INF brown.cheese.DEF do.PAST he not, 'He said he was going to eat the brown cheese, but he didn't.'
- (138) lovet å vaske bilen Jasper og to wask.INF car.DEF Jasper promise.PAST and bilen så sannelig.19 vaske gjorde han car.DEF wash.INF do.PAST he so truly. 'Jasper promised to wash the car, and wash the car, he did (indeed).'

The similar structures exist also in British English, which these examples demonstrate.<sup>20</sup>

- (139) He said he would eat the brown cheese, but eat the brown cheese, he would not do
- (140) Rab will be running late, and Morag will (be), too.
- (141) Rab should have arrived by now, and Morag should (have), too.
- (142) Rab might have been fired, and Morag might (have (been)).

In other words, Norwegian *gjøre* seems to show similar behavior like British English *do* in that v spells out as *gjøre/do* only in cases where v is not adjacent to V. If v and V are adjacent, they spell out as the lexical verb V. This point is strengthened by the VP topicalization structures in both Norwegian and English.

Another resemblance between the behavior of British English *do* and *gjøre* deals with active vs. passive VPs. In Norwegian, we saw how *gjøre* (do) seems to combine with an active VP, whereas *bli* (be) combines with a passive VP. Evidence show that this seems to be the case with British English *do* as well.

- (143) John said he would be promoted, but he has not been/(\*done)/(\*been done).
- (144) John said he would promote the lieutenant, but he hasn't done/(\*been).

These examples yield British English *do* in passive is impossible. This would also follow if British English *do* and passive *be* are in complementary distribution, like the Norwegian equivalents.

Now, if we return to Thoms' paradigm repeated in (133), *do*-support appears in different constructions such as negation, VP topicalization, and interrogative phrases in English. In Norwegian, on the other hand, the equivalent *gjøre* does not show up quite as frequently. The assumed reason why *do*-support appear in these other cases in English is because Norwegian has a different set of movements to the main verb. The Norwegian main verb will move to T and then in general keep the adjacency properties. Therefore, there will generally not be conditions for *gjøre* to appear. Nevertheless, *gjøre* does show up in certain conditions, which is when the main verb cannot move itself because it has been elided (i.e., not pronounced) like in (145), or if the whole VP has moved (146).

<sup>&</sup>lt;sup>19</sup> This example is from Houser et al. (2011, p. 214, my translation).

<sup>&</sup>lt;sup>20</sup> The examples in (140-142) are from Thoms (2011, p. 8).

(145)	Mona og	Jasper vaske	t	bilen,		eller	Mona
	Mona and	Jasper wash.	PAST	car.D	EF	or	Mona
	gjorde	det retter	e	sagt.			
	do.PAST	that rather		say.PA	ART.		
	'Mona and Ja	asper washed t			er Mon	a did.'	
(146)	Jasper lovet		å vaske	е	bilen		og
	Jasper prom	ise.PAST	to was	h.INF	car.DI	ĒF	and
	vaske	bilen	gjorde		han	så sar	nelig <sup>21</sup>
	wash.INF	car.DEF	do.PAS	Т	he	so tru	ly.
	'Jasper prom	nised to wash t	he car, a	and wa	sh the	car, he	did (indeed).

The appearance and behavior of *gjøre* is nevertheless rather mysterious. Recall the NICE properties applied to Norwegian, where Norwegian main verbs have the properties of N(egation), I(nversion) and E(mphasis). C(ode) (and I(nversion) in code constructions, on the other hand, stood out from other properties and opened for this mysterious corner in Norwegian. By using constructions like tag questions, we saw how Norwegian verbs indeed have different properties of which only a subset seem to work in the latter construction:

(147)	Jeg danse	er ikl	ke swing,	gjør	du?	
	I danse	e.PRES no	ot swing,	do.PRES	you	
	'I don't dand	ce swing, do	o you?'			
(148)	*Jeg danse	er ikl	ke swing,	danser	du?	
	I dance	e.PRES no	ot swing,	dance.PRES	you	
	`I don't dand	ce swing, do	o you?'			
(149)	Moren	min va	sker	hver dag,	gjør	din?
	Mother	my wa	ash.PRES	every.day,	do.PRES	your
	'My mother	washes eve	ery day, doe	s yours?'		
(150)	*Moren	min va	sker	hver dag,	vasker	din?
	Mother	my wa	ash.PRES	every.day	wash.PRES	your
	'My mother	washes eve	ery day, doe	s yours?'		
(151)	Jeg hører	- ikł	ke på nor	sk musikl	k, gjør	du?
	I listen	n.PRES no	ot on Nor	wegian music	do.PRI	ES you
	`I don't liste	n to Norweg	gian music,	do you?'		
(152)	*Jeg hører	- ikł	ke på nor	sk musikl	k, hører	du?
	I listen	n.PRES no	ot on Nor	wegian music	listen.PRES	you
	`I don't liste	n to Norweg	gian music,	do you?		

The fact that Norwegian does distinguish between verbs and properties after all is surprising. Only certain verbs allow for code and tags, and these are verbs like: *ha* 'have', *kunne* 'can', *ville* 'will', *gjøre* 'do', *skulle* 'should', *være* ''be', *må* 'must', *få* 'get', etc.

(153)	Jeg	har	aldri	spilt	tennis	s, har	du?
	Ι	have.PRES	never	play.PART	tennis	, have.PRES	you
	`I′ve	never played t	ennis, h	ave you?'			
(154)	Jeg	kan	ikke	møtes	sent,	kan	du?
	I	can.PRES	not	meet.INF	late	can.PRES	you
	`I can	i't meet late, c	an you?	) <i>'</i>			

<sup>&</sup>lt;sup>21</sup> This example is from Houser et al. (2011, p. 214, my translation).

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(155)	Jeg	vil	ikke	spise	fisk i dag,	vil	du?
	Ι	will.PRES	not	eat.INF	fish to.day	will.PRES	you
	`I dor	n't want to eat	fish too	day, do you?'			

In other words, it seems to be the case that there is a difference between main verbs and auxiliary verbs in Norwegian after all. Norwegian does have a separate group of verbs that have different properties than the ones of main verbs, and it is in cases within the property of C and I (in combination with C) that they are explicitly visible. The reason for that is that auxiliary verbs are these verbs that can be in little v positions, one of which *gjøre* is under certain circumstances, which I argued in the *gjøre*-section and in the paragraphs above. These circumstances are when the VP is not adjacent to the vP, which is either because it has been moved or been elided. The former is for example in VP topicalization constructions, such as in (137) and (138), while the latter is in the case of tag questions, like (147)-(155).

Interestingly, Thoms (2011) arguments on British English *do* can account for the behavior of *gjøre*. The appearance of *gjøre* has to do with verb movements, which explains why *gjøre* shows up in much less situations in Norwegian than *do* does in English. In Norwegian, all finite verbs move to T, while they remain in situ in English. Therefore, as *gjøre* and *do* are spell outs of little v, and little v only spell out as *gjøre* and *do* when v and T, and VP and vP are not adjacent, this explains why Norwegian *gjøre* shows up much less than its equivalent *do*. In Norwegian, it shows up in ellipsis and fronting, but in English it does not spell out when it is adjacent to V. You only have *gjøre* when there is a missing verb phrase. This can be explained if I take this proposal from Thoms (2011) that little v only spells out and is pronounced as *do* when it is not adjacent to V. For example, if it is adjacent to V, you do not say (156) and (157).

(156)	*He will do eat the cake.
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(157)	*Han	skal	gjøre	spise	kaken
	He	will.PRES	do.PART	eat.INF	cake.DEF
	'He is going to eat the cake'.				

Thus, what is important for the pronunciation of gj and do is whether little v is adjacent to T or not.

# 4 Summary

Auxiliary verbs have been a controversial topic within the field of syntax. It is no doubt that there are different types of verbs in English which are called auxiliary verbs, which is also agreed upon in the literature. Within the English language, diagnostics have been developed to distinguish the properties of auxiliary verbs from other types of verbs (i.e., main verbs). Auxiliary verbs have the properties of negation, inversion, code and emphasis (NICE), as opposed to English main verbs. However, these properties are not universal and consequently the status of auxiliary verbs are less clear in other languages, one of them being Norwegian, which this thesis focuses and compares English with.

By applying the NICE properties to verbs, Norwegian was not able to distinguish certain verbs from main verbs like English. As a result, Norwegian main verbs have the properties of N, I and E similarly to the verbs that English treats as auxiliary verbs. Interestingly, the property of code provides a mysterious corner in Norwegian where Norwegian does seem to distinguish verbs. In constructions like tag questions, there are only certain verbs that can appear, and these are the verbs English treats as auxiliary verbs. This goes on to demonstrate that there are auxiliary verbs in Norwegian after all, but they are just not as apparent as they are in English.

This led to an examination and discussion of *gjøre*, which is an equivalent of English *do*support. According to Houser et al. (2011), *gjøre* is of category auxiliary verb. In that, they argue that *gjøre* is not a category of v, V or T, to which I oppose. As an alternative view, I argue that *gjøre* is a kind of a little v, following the lines of Platzack (2012). To support my argument, I refer to Harwood (2014) and his revised tree structure where *gjøre* can be identified with *voice* as Harwood proposes. Moreover, by looking at British English *do*, there is in fact a theory about *do* which also can be extended to Norwegian considering when *gjøre* is pronounced and when it is silent: "v only spells out as *do* [and *gjøre*] when it is not adjacent to V at morphology; if v and V are adjacent at morphology, they spell out as the lexical verb V" (Thoms, 2011, p. 12).

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Figure 1: from Gelderen (2013, p. 8)

Figure 2: The Syntax of Wh -Questions in Gichuka - Scientific Figure on ResearchGate. Available from: <u>https://www.researchgate.net/figure/</u> [accessed 6 May, 2022]

Figure 3: from Harwood (2014, p. 305)

Figure 4: from Harwood (2014, p. 307)

Figure 5: from Harwood (2014, p. 311)

Figure 6: from Harwood (2014, p. 308)

# Masterarbeidets relevans for virket som lektor

Å skrive en masteroppgave har vært en krevende øvelse, men samtidig har det gitt meg dyrebare erfaringer som jeg kan ta med meg ut i mitt virke som lektor i skolen.

Først vil jeg peke på samarbeidet med veileder. Ved at jeg har forholdt meg til en veileder i dette prosjektet, har jeg fått erfaringer som jeg tar med meg inn i klasserommet når det er *jeg* som skal veilede elever. I denne sammenhengen har det vært lærerikt å reflektere over spørsmål som dette: Hvordan liker jeg å veiledes? Hvordan foretrekker jeg å jobbe? Hvordan foretrekker jeg at veilederen gir meg tilbakemeldinger? Det å kontinuerlig reflektere over slike spørsmål mener jeg er en viktig del av det å være lærer. Dette har også gjort meg mer bevisst over hvordan et maktforhold mellom veileder og student eller lærer og elev kan påvirke en som er i student- eller elevrollen.

Jeg vil også trekke fram det «kollegiale samarbeidet» som jeg har erfart. Selv om dette har vært et selvstendig prosjekt, har jeg under hele prosessen diskutert innhold og tematikk med medstudenter. Jeg har hatt stort utbytte av dette og jeg kan se det potensialet som ligger i å samarbeide, som en slags Vygotsky's proksimale utviklingssone i praksis. Disse erfaringene fra masterprosessen vil jeg ta med meg videre når jeg som lærer skal tilrettelegge for elevsamarbeid og generelt elevsamhandling i klasserommet.

Når det kommer til selve masteroppgaven, har jeg fordypet meg i syntaks med spesifikt fokus på hjelpeverb. Etter denne masteroppgaven har jeg fått en generell oversikt over verb i både engelsk og norsk, i tillegg til en grundig innsikt i likheter og ulikheter mellom ulike verbklasser i engelsk og norsk, samt hvordan verb oppfører seg rent syntaktisk. Denne kompetansen er også svært anvendelig i klasserommet da grammatikk er en sentral del av det å beherske språk, hvilket kompetansemålene også viser. Videre sier læreplanen i engelsk VG1 SF at mål for opplæringen er at elevene, blant annet, skal kunne «uttrykke seg nyansert og presist med flyt og sammenheng, idiomatiske uttrykk og varierte setningsstrukturer tilpasset formål, mottaker og situasjon» (Utdanningsdirektoratet, 2020). Denne masteroppgaven har gitt meg stor innsikt i nettopp dette. Gjennom prosesssen har jeg kontinuerlig reflektert over egne formuleringer og skriving. Jeg mener at denne kontinuerlige prosessen har gjort meg bedre språklig i form av at jeg har utvidet vokabular, og at jeg har reflektert over hva som er gode formuleringer og mindre gode formuleringer, hvilket rett og slett gjør meg til en språklig dyktigere engelsklærer.

Videre forteller læreplanen at elevene skal kunne «gjøre rede for andres argumentasjon og bruke og følge opp andres innspill i samtaler og diskusjoner om ulike emner» og «bruke ulike kilder på en kritisk, hensiktsmessig og etterrettelig måte» (Utdanningsdirektoratet, 2020). Særlig disse kompetansemålene har vært svært viktige for masteroppgaven min. Å skrive masteroppgave krever at man er nøyaktig i alle detaljer man gjør, og særlig i det som innebærer research av litteratur, og kildekritikkog etikk. En del av opplæringens verdigrunnlag under Overordnet del av læreplan er blant annet «kritisk tenking og etisk bevissthet». Elevene skal dannes i undervisningsløpet, og disse to punktene er særlig viktige for å bli et dannet og demokratisk menneske. I og med at jeg selv har fått god øvelse i dette gjennom masteroppgaven min, gjør det at det blir lettere for meg når jeg også skal implementere dette hos elevene gjennom undervisningen min.

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