The semantics of syntactic constructions

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Abstract

In this paper it is shown that Danish syntactic constructions, such as accusative + infinitive, e.g. *Hun så ham komme* (She saw him come), accusative + to-infinitive, *that*-clauses and preposition + *that*-clauses, have their own type of meaning potential, exactly like lexical items, such as perception predicates: *see, hear*, control predicates: *permit, offer,* and mental NEG-raising predicates: *think, hope*. The types of meaning that syntactic constructions can have as predications are: state of affairs, proposition, illocution and fact. Both lexical items and syntactic constructions are polysemous and disambiguate each other when combined in a clause according to a general rule that may be stated similarly to the way that the rule for a lexical entry may. Some examples such as *Hun bad ham komme* (She asked him to come) and *Hun lod ham begrave* (She let him be buried) are identified and given an explanation.

1. Introduction

Usually, syntax is considered to be about grammatical forms, while semantics is about the meaning of lexical items, but every syntactic construction has a meaning, as does a lexical item, and the meaning of a syntactic construction can be ambiguous exactly as lexical items can. In this article, the meaning of some Danish syntactic constructions containing two semantic predications will be investigated; these are constructions like: verb + accusative + infinitive, verb + accusative + *at*-infinitive, verb + *that*-clause, verb + preposition + *that*-clause. Examples are shown in – .

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(1) **verb + accusative + infinitive (state of affairs)**

Hun	så	ham	komm-e.
she.NOM	*see*.PAST	*he*.ACC	*come*-INF

'She saw him come.'

(2) **verb + accusative + *to*-infinitive (illocution)**

Hun	forbød	ham	at	komm-e.
she.NOM	*forbid*.PAST	*he*.ACC	*to*	*come*-INF

'She forbade him to come.'

(3) **verb + *that*-clause (fact/proposition)**

a.

Hun	så	at	han	kom.
she.NOM	*see*.PAST	*that*	*he*.NOM	*come*.PAST

'She saw that he came.'

b.

Hun	tro-ede	at	han	kom.
she.NOM	*think*-PAST	*that*	*he*.NOM	*come*.PAST

'She thought that he came.'

(4) **verb + preposition + *that*-clause (fact)**

Hun	*så*	*på*	*at*	*han*	*kom.*
she.NOM	see.PAST	on	that	he.NOM	come.PAST

'She watched him coming.'

The claim in this article is that the four constructions following the verb are of four different types of predications called: State of Affairs, Propositions, Illocutions and Facts. The purpose of this paper is to describe exactly how the semantic units correspond to the syntactic ones.

1.1 The semantic terminology

In the following, a distinction is made between syntactic constructions and semantic predications (Lyons 1977 ch. 16; Leech 1981 ch. 13; Dik 1997 ch. 12; Togeby 2003 §§ 168-173). The semantic terms *predication, predicate* and *argument* correspond roughly to the syntactic terms *clause, verb phrase* and *noun phrase*. A predication is built up of a predicate (**P**) and a number of arguments depending of the type of predicate (**A^1 + P + A^2 + A^3**). The arguments are of one of the three types: agent, experiencer or neutral.

A state of affairs is a predication with a predicate, aspect, arguments and manner adverbs. Predicates are one-place, two-place or three-place; arguments are Agent, Neutral or Experiencer; a state of affairs is indicated by slashes: /**PN**/.

A proposition is a state of affairs + subordinating operator (**sb**) + predicate tense + argument definiteness + propositional adverbs + truth value; a proposition is initiated by a subordinating operator *at* 'that'. Tense = present/past; definiteness = definite (*the lion*), indefinite (*a lion*), nondefinite (bare form): (*lion*); truth value = Asserted /Negated. Propositions are indicated by square brackets **[PN]**.

An illocution is a proposition + illocutionary force; illocution = expressive, constative, normative, hypothetic. An utterance, delineated by full stops, made up of two or more predicates, is in itself an illocution. Illocutions are indicated by round brackets **(PN)**.

A fact is a presupposed true proposition. Facts are indicated by curly brackets **{PN}**.

2. Types of Predicate

2.1 Perception predicates

When governed by predicates denoting perception, the second predicate (what is perceived) is either a state of affairs (1), (5) or a fact (6), (7), (8).

Hun	*så*	ham	komm-e.
she.NOM	*see*.PAST	*he*.ACC	*come*-INF

'She saw him come.'

(5)

De	hør-te	ham	spill-e	klaver.
they.NOM	*hear*-PAST	*he*.ACC	*play*-INF	*piano*.NONDEF

'They heard him play the piano.'

(6) (cf.)

Hun	så	at	han	var	komm-et.
she.NOM	*see*.PAST	*that*	*he*.NOM	*be*.PAST	*come*-PRF

'She saw that he had come.'

(7) Hun hør-te at han vil komm-e (i morgen).
she.NOM *hear*-PAST *that* *he*.NOM *will*.PRS *come*-INF (tomorrow)
'She heard that he will be coming.' (tomorrow).

P^2 in (1) and (5) are part of a state of affairs since P^2 has no tense inflection, cannot be negated and must take place at the same time as P^1:

(8) *Hun hav-de set ham ikke komm-e.
she.NOM *have*- PAST *seen* *he*.ACC *not* *come*-INF

(9) *Hun hør-te ham vill-e komm-e.
she.NOM *hear*-PAST *he*.ACC *will*-INF *come*-INF

P^2 in and (8) are facts since P^2 has tense inflection, can be negated, differs in time from P^1, and is entailed by the asserted as well as by the negated version of P^1 as seen in (12) and .

(10) (cf) Hun så at han ikke var komm-et.
she.NOM *see*.PAST *that* *he*.NOM *not* *be*.PAST *come*-PRF
'She saw that he hadn't come.'

(11) (cf.) Hun hør-te at han ikke vil
she.NOM *hear*-PAST that *he*.NOM *not* *will*.PRS
komm-e. (i morgen)
come-INF (tomorrow)
'She heard that he will not be coming (tomorrow).'

(12) Hun så at han var kommet. = Han var kommet.
'She saw that he had come.' 'He had come.'

(13) Hun så ikke at han var kommet. = Han var kommet.
'She didn't see that he had come.' 'He had come.'

Lexical verbs of perception taking two different syntactic constructions have different semantic meanings in the two occurrences, respectively:

se^1: 'to perceive something that causes the perception.'
se^2: 'to realize by means of perception (possibly of something else) that something is the case.'

(14) Hun så på køreplanen at toget var kørt.
'She saw on the timetable that the train had left.'

This difference is suspended if the perception predicate itself is governed by a NEG-raising predicate: *Hun troede at hun så ham komme*. (She thought that she saw him coming) is equivalent to *Hun troede at hun så at han kom* (She thought that she saw that he came).

The difference between the two meanings af the perception predicate is explained by Leech (1981) in the following way: In the that-clause construction the PN2 is a fact that is subordinated as the second argument in PN1.

a. Hun så at han kom.
she. saw that he came
'She saw that he came.'

(A^1 + P^1 + A^2 {sb A^3 + $P^2\}_{PN2}$)
(SHE SAW^2 THAT HE CAME})

In the accusative + infinitive construction, after verbs of perception, P^2 is 'featurized', i.e. downgraded as a feature in P^1; in , *Hun så ham komme.* (She saw him come), there is only one composite predicate: SEE<COME>. This predication could also have been expressed as *Han kom, set af hende.* (He came, seen by her).

Hun så ham komme.
she saw him come.
'She saw him come.'

(A^1 + P^1 <P^2> + A^2)
(SHE SEE <COME> HIM)

2.2 Control predicates

Constructions consisting of verb + accusative + *to*-infinitive normally have so-called control predicates as P^1 and an illocution as A^2. Control predicates are: *forbyde* (forbid)*, tillade* (permit)*, befale* (order)*, tilbyde* (offer).

Hun	forbød	ham	at	komm-e.
she.NOM	*forbid*.PAST	*he*.ACC	*to*	come-INF

'She forbade him to come.'

The A^2 in a predication with control predicates is an illocution with a normative illocutionary force; the verb *forbyde* (forbid) means 'tell someone that he or she should not do something'. The person referred to by A^2 of P^1 is coreferential with A^1 of P^2, and PN^2 cannot be transformed into a passive, as it can in an accusative + infinitive construction.

(15) Hun forbød ham at komme.
she forbade him to come.
'She forbade him to come.'

(A^1 + P^1 + A^2 + A^3(sb + A^1 + shall + not + P^2)$_{PN2}$)
(SHE TELL HIM (THAT HE SHALL NOT COME))

(16) Hun så ham spise *æblet*. ≈ Hun så æblet
'She saw him eat the apple.' 'She saw the apple
blive spist.
being eaten.'

(17) Hun forbød ham at spise *æblet* ≠ *Hun forbød æblet at blive spist.
'She forbade him to eat the apple.' *She forbade the apple to be eaten.'

Control predicates can be decomposed as:
TELL + SOMEONE + (THAT HE SHALL DO SOMETHING).

2.3 Mental NEG-raising predicates

Some mental predicates that take propositions as their A^2 have what is called NEG-raising, e.g. *tro* (think), *ønske* (wish), *håbe* (hope). It means that negation of P^1 is synonymous with negation of P^2, and double negation equals assertion, which does not hold for predicates taking facts as their A^2. A^2 of these predicates are not facts, nor events, but possible facts, or thoughts. Neither the asserted nor the negated P^1 entails PN^2.

b. Hun tro-ede at han kom.
she.NOM think-PAST *that* *he*.NOM *come*.PAST
'She thought that he came.'

(18) a. Hun troede at han kom. ≠ Han kom.
'She thought that he came.' 'He came.'

b. Han troede ikke at han kom ≠ 'Han kom.
she thought not that he came 'He came.'
'She didn't think that he came.'

(19) Hun troede ikke han kom. = Hun troede han ikke kom.
she thought not he came *She thought he not came*
'She didn't think he came.' 'She thought he didn't come.'

(20) a. Hun troede ikke at han ikke kom ≈ Hun
she thought not that he not came *She*
'She didn't think that he didn't come.'
troede at han kom
thought *that* *he* *came*
'She thought that he came.'

Hun vidste ikke at han ikke kom. ≠ Hun vidste
she knew not that he not came *She knew*
at han kom.
that he came
'She didn't know that he didn't come.' 'She knew that he came.'

(21) Hun troede at han kom.
she thought that he came
'She thought that he came.'

(A^1 + P^1 + A^2 [sb A^1 + P^2]$_{PN2}$)
(SHE THINK [THAT HE CAME])

The general problem of factivity of predicates like *know* is not addressed here due to length restrictions.

2.4 Agentive perception

In the construction perception predicate + preposition *på* + Fact, the predicate is imperfective and the argument A^1 is an agent, whereas A^1 in perception predicate constructions with accusative + infinitive and with *that*-clause the predicate is imperfective and A^1 is an experiencer.

Hun så ham komme.
'She saw him come.'
EXPERIENCER

Hun så på at han kom.
'She watched him coming.'
AGENT

(22) Hun hørte på at han spillede klaver.
'She was listening to him playing the piano.'
AGENT

(23) a. Hun holdt op med at høre på at han spillede klaver.
she held up with to hear on that he played piano
'She stopped listening to him playing the piano.'

b. *Hun holdt op med at høre ham spille klaver.
she held up with to hear him play piano

c. *Hun holdt op med at høre at han spillede klaver.
she held up with to hear that he played piano

(24) (cf) Hun hørte at han spillede.

($A^{1\text{-EXPERIECER}}$ + P^1 + A^2 {sb A^3 + P^2}$_{PN2}$)
(SHE HEAR {THAT HE PLAY})

(25) Hun hørte på at han spillede.
She heard on that he played

($A^{1\text{-AGENT}}$ + P^1 + prp + {sb A^3 + P^2}$_{PN2}$)
(SHE HEAR {THAT HE PLAY})
'She was listening to him playing.'

3. Semantics of syntactic constructions

Five types of syntactic constructions involving two predicates correspond to four types of meaning of PN^2 depending of the type of P^1: An acc. + inf. construction denotes a state of affairs, a *that*-clause denotes a fact, an acc. + *to*-inf. construction denotes an illocution, and preposition + *that*-clause denotes a fact. (In this article the problem of factivity is only dealt with in connection with perception predicates in order to keep under the length limit).

P^1 PREDICATE TYPE	**PN^2 CONSTRUCTION**	**PN^2 MEANING**
experiencer perception imperfective	acc. + inf.	/state of affairs/
experiencer perception perfective	*that*-clause	{fact}
agent perception imperfective	*på* + *that*-clause	{fact}
control	acc. + *to*-inf.	(illocution)
NEG-raising predicate	*that*-clause	[proposition]

The lexical items have polysemy, e.g. *se* (see) and *høre* (hear) mean 'to perceive the state of affairs that something is causing the perception', when in an acc. + inf. construction, and 'to realize by means of perception (possibly of something else) that something is a fact' in a *that*-clause construction. In this way, the syntactic construction disambiguates the lexical item. *That*-clauses are ambiguous too. Either they refer to a fact, or to a proposition (a possible fact) depending on whether they are governed by a perception predicate or a mental activity with NEG-raising. In this way, the lexical item disambiguates the syntactic construction. Disambiguation goes both ways.

4. Problems

The rule stated above is consistent, and will always yield a necessary disambiguation of a syntactic construction. But, if an acc. + inf. construction is governed by the control predicate *bede* (ask) it does not mean state of affairs.

(26) Hun bad ham komm-e.
she asked him. ACC *come*-INF
'She asked him to come.'

Like , , is analysed as a control predicate and the subordinated P^2 is a normative illocution:

(27) Hun bad ham komme.

(A^1 + P^1 + A2 + A^3(sb A^1 + shall + P^2)$_{PN2}$)
(SHE TELL HIM (THAT HE SHALL COME))

(28) Hun bad ham spise æblet. ≈ *Hun bad *æblet*
she asked him eat the apple She asked the apple
blive spist.
be eaten.

(29) a. Hun bad ham komme. ≠ Han kom.
she asked him come he came.
'She asked him to come.' 'He came.'

b. Hun bad ham ikke komme. ≠ Han kom.
she ask him not come he came
'She didn't ask him to come.' 'He came.'

The verb *bede* (ask) is a control predicate and it takes an acc. + *to*-inf. construction, but without *to* (*at*). The following authentic example is an argument in favour of this analysis since only equivalent syntactic constructions and semantic equivalent predications are coordinated by *og* (and).

(30) Hun bad ham være god ved Maria og at sørge
she asked him be good to Maria and to provide
for de tre ladyer.
for the three ladies
'She asked him to treat Maria well and to take care of the three ladies.'
(Https. Books.google.dk>books: G.J. Mayer 2015: *History*)

Secondly, some examples with *lade* (let) are not accounted for by the rule of the meaning of syntactic constructions. Even though the predicate *lade* is not a perception predicate it is constructed like perception predicates with acc. + inf. and P^2 as a downgraded state of affairs: LET<COME> HIM.

(31) Hun lod ham komme.

(A^1 + P^1<P^2> + A^2)
(SHE LET<COME> HIM)

(32) a. Hun lod ham komme. = Han kom.
she let him come *he came*
'She let him come.' 'He came.'

b. Hun lod ham ikke komme. = Han kom ikke.
she let him not come *he came not*
'She didn't let him come.' 'He didn't come.'

(33) a. *Hun har ladet ham ikke komme.
she has let him not come

b. *Hun lod ham være kommet.
she let him be come

(34) Hun lod ham spise æblet = Hun lod æblet blive spist

(A^1 + P^1 <P^{2akt} + A^3> + A^2) **(A^1 + P^1<P^{2pas}> + A^3)**
SHE LET <EAT APPLE> HIM SHE <LET BE EATEN> APPLE

But after the predicate *lade* (let) it is possible to find constructions like :

(35) Hun lod ham begrave i et prægtigt gravmæle . . .
she let him bury in a magnificent monument
'She had him buried in a magnificent sepulchral monument. . . '

. . . . .men måtte senere lade gravmæl-et fjerne.
but might later let monument-the remove
. . . . . 'but later had to have the monument be removed.'
(http://www.danskeherregaarde.dk/nutid/saebygaardnordjylland).

In these two examples (from the same authentic sentence), P^2 has active form and passive meaning. That is not possible with verbs of perception. It seems as if clauses with P^2 in active form and P^2 in passive form are synonymous, though they must be analysed differently.

(36) Hun lod ham begrave
she let him bury
'She had him buried.' = 'She let (them) bury him.'

$A^1 + P^1$ $< P^{2act} +$ $A^3 >$
SHE LET <BURY HIM>

(37) Hun lod ham blive begravet.
she let him be buried
'She had him buried.'

$A^1 + P^1$ $< P^{2pas}>$ A^3
SHE LET <BE BURIED> HIM

(38) *Hun så *æbl*-et spis-e
she.NOM *see*.PAST *apple-the eat*-INF

A possible explanation of this suspension of the active-passive opposition could be that A^3 according to the analysis is downgraded as an argument of P^2 in but as an argument of P^1 in , yielding slightly different interpretations:

(39) Hun lod ham begrave ≈ 'Hun sørgede for at X begravede ham.'

she let him bury
'She had him buried.' 'She took care that X buried him.'

(40) Hun lod ham blive begravet. ≈ Hun sørgede ikke for at han ikke blev begravet.
she let him be buried
'She had him buried.' 'She didn't take care for him to be not buried.'

5. Conclusion

It can be concluded that Danish syntactic constructions, like lexical items, have their own meaning potential that can be described, exactly as with lexical items in a dictionary. The construction accusative + infinitive combined with a perception predicate has the meaning of predication of a state of affairs; the construction accusative + to-infinitive combined with a control predicate has the meaning of a predication of an illocution. *That*-clauses, combined with perception predicates, have the meaning of a predication of a fact, and combined with a mental predicate the meaning of a predication of a proposition. Some examples break this regularity: 1. *Hun bad ham komme* (She asked him to come) where an accusative + infinitive construction combined with a control predicate has the meaning of predication of a illocution. This is explained as an accusative + to-infinitive construction without *to*. 2. *Hun lod ham begrave* (She let him be buried) where the predicate *begrave* in the accusative + infinitive construction has active form but passive meaning. It is explained as a special meaning variant of downgraded predication of state of affairs.

Literature

Dik, Simon C. 1997: *The Theory of Functional Grammar 1-2,* 2nd edn. Berlin: Mouton de Gruyter.
Leech, Geoffrey 1981: *Semantics,* 2nd edn. Harmondsworth: Penguin Books.
Lyons, John 1977: *Semantics 1-2*. Cambridge: Cambridge University Press.
Togeby, Ole 2003: *Fungerer denne sætning?* København: G.E.C.Gad.