0. Introduction
In this article I propose an analysis of the Danish causal conjunctions *fordi*, *siden* and *for* based on the framework of Danish Functional Grammar (Jakobsen 1995, Engberg-Pedersen 1996, Heltoft & Hansen 1999). As conjunctions they relate two clauses, and their semantics have in common that it indicates a causal relationship between the clauses. Underlying the analysis is the assumption of Functional Grammar that when language users persist in expressing, in casu, causal relations in different ways there must be some functional difference encoded in this use. The causal conjunctions are different as far as their distribution is concerned; *siden* conjoins a subordinate clause and a main clause, *for* conjoins two main clauses, and *fordi* is able to do both. Methodologically I have based my analysis on these distributional properties comparing *siden* and *fordi* conjoining a subordinate and a main clause, and comparing *for* and *fordi* conjoining two main clauses, following the thesis that they would establish a causal relationship between different kinds of content. My main findings are that *fordi* establishes a causal relationship between the events referred to by the two clauses, and the whole utterance functions as a statement of this causal relationship. *Siden* presupposes such a general causal relationship between the two events and puts forward the causing event as a reason for assuming or wishing or ordering the caused event, *siden* thus establishes a causal relationship between an event and a speech act. *For* equally presupposes a general causal relationship between two events and it establishes a causal relationship between speech acts, and *fordi* conjoining two main clauses is able to do this too, but in this position it also maintains its event-relating ability, the interpretation depending on contextual factors.

Some of the examples in this article are constructed, some of them are drawn from my spoken language corpus (transcribed conversations, interviews, debates etc.), and a few are from written language.

1. Subordinate and main clause
To distinguish between *fordi* introducing a subordinate and a main clause word order is a formal criteria. In terms of the field analysis (Diderichsen 1946 and Heltoft 1999); in the subordinate clause the negation or the sentence adverbial in the middle field precedes the finite verb, (1a), and in
the main clause the negation or the sentence adverbial in the middle field follows the finite verb, (1b).

(1) a. Fordi han ikke er kommet  
    *Because he not is come*  
    ‘Because he has not come’

b. Fordi han er ikke kommet  
    *Because he is not come*  
    ‘Because he has not come’

The word order in (1a) does not always signal subordination, this is discussed in depth in Heltoft & Hansen (1999), but as far as *fordi* is concerned it does, and the issue need not be further treated here as word order only serves to identify the subordinate *fordi*-clauses. *Siden* governs the word order in (1a), and the *siden*-clause is always subordinate. What is of interest here is that according to Dik (1997) and Heltoft & Hansen (1999) the functional-semantic difference between the subordinate and the main clause is that the main clause has a speech act value whereas the subordinate clause does not have a speech act value of its own. This restricts the kinds of content that causal conjunctions can relate depending on their distribution.

2. Content event and speech act

Within Functional Grammar the content side is described in the model of the layering of the clause. One major distinction is between the propositional content of a clause denoting an event and the illocution, the speech act value. Speech act values can be classified in more or less fine-grained ways, Togeby (1993: 636ff ) has an overview, and to account for the functions of the causal conjunctions the classification of speech act types need not be very fine-grained. The following classification is based on the grammaticalized illocutionary framing in Danish, and on the layering of the clause. The illocutionary framing encodes a distinction between reality and non-reality. Within reality the relevant distinction is between factuality an non-factuality.

2.1 Reality and non-reality

The Danish language structure encodes illocutionary frame in word order in main clauses, the illocutionary frame is a rough distinction between potential speech act values. In terms of the field analysis (Heltoft 1999) it is encoded in the choice between filling in P1, the fundament, a verb second
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position so to say, (2a), and not filling in the fundament, a verb first position, (2b) and (2c):

\[(2)\]

<table>
<thead>
<tr>
<th>Fundament</th>
<th>finite verb</th>
<th>subject position</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Han</td>
<td>kommer</td>
<td>subject position</td>
</tr>
<tr>
<td></td>
<td><em>He</em></td>
<td><em>comePRS</em></td>
</tr>
<tr>
<td>‘He’</td>
<td><em>comes</em></td>
<td></td>
</tr>
<tr>
<td>b. Ø</td>
<td>kommer</td>
<td>subject position</td>
</tr>
<tr>
<td></td>
<td><em>comePRS</em></td>
<td><em>han</em></td>
</tr>
<tr>
<td>‘Does he come’</td>
<td></td>
<td><em>he</em></td>
</tr>
<tr>
<td>c. Ø</td>
<td>kom</td>
<td>subject position</td>
</tr>
<tr>
<td></td>
<td><em>comeIMP</em></td>
<td><em>du</em></td>
</tr>
<tr>
<td>‘Do come!’</td>
<td></td>
<td><em>you</em></td>
</tr>
</tbody>
</table>

The difference between (2a) on the one hand and (2b) and (2c) on the other, encodes a choice between reality and non-reality, the illocutionary framing being that the (2b) and (2c) types can only represent “subjective” speech act types. The subjective speech act types are speech acts like wish, request, permission, order and question, and they have in common that one can not contest the truth value of the propositional content, one can only contest the sender’s sincerity. The non-reality speech acts correspond to Searle’s commissive, expressive and directive speech acts. For the present purpose I call the non-reality speech acts the wish type, I paraphrase it *I wish that* + propositional content.

The (2a) type, the reality type, has the constative speech act as its basis\(^1\). I paraphrase it *I state that* + propositional content. It has two variations, the assumption, where the sender graduates the propositional content on a scale of probability by means of sentence adverbs like probably, modal verbs or expressions like *I think*. I paraphrase it *I assume that* + propositional content. The constative and the assumption correspond to Searle’s representatives. And furthermore the evaluation, where the sender signals his or her attitude towards the propositional content on a scale from bad to good by means of adverbs like luckily or expressions like

\(^1\) It should be noted that the illocutionary framing is rough in the sense that the (2b) and (2c) type always receives a non-reality interpretation and never the reality interpretation, whereas the (2a) type could receive any primary speech act interpretation depending on the interactional moves. However, the discussion of the relation between linguistic expression and the more fine-grained speech act classification is not relevant when talking about causal conjunctions.
I’m sorry that. I paraphrase it I’m happy that + propositional content. The constative, the assumption and the evaluation have in common that one can contest the truth value of the propositional content. Contestability of the truth value of the propositional content is the feature encoded by the verb first and verb second word order.

2.2 Factuality and non-factuality
The wish type and the assumption share the feature non-factuality of the propositional content, the wish type in the sense that the event referred to by the propositional content is not (yet) a fact, but a desired or an undesired fact, and the assumption in the sense that the sender signals his or her uncertainty as to whether the event referred to by the propositional content is a fact.

Both distinctions, the reality versus non-reality encoded in the main clause word order, and the factuality versus non-factuality show up to be relevant in the analysis of the causal conjunctions.

3. Fordi + subordinate
3.1 Fordi relating events
When fordí introduces a subordinate clause the fordí-clause does not have a speech act value on its own (according to section 1), the fordí-relation therefore only involves one utterance carrying one speech act value. Fordí introducing a subordinate clause establishes a causal relation between the event referred to by the propositional content in the subordinate clause and the event referred to by the propositional content in the main clause. To put it another way, because fordí + subordinate claims a causal relation between events, the utterance is a statement about a causal relationship, a statement about a cause-effect relation. As a consequence fordí + subordinate does not accept to appear in utterances with wish type speech act value, (3):

(3) *Gå i seng fordí du jo er træt
   GoIMP to bed because you are tired
   ‘Go to bed because you are tired’

The position of the intranslatable sentence adverb jo, signalling evidentiality, indicates that the word order is the subordinate. As the utterance is a statement about a causal relation between events, the scope of evaluative and probability adverbs is on the relation, not on the propositional content in the main clause:
(4) a. Bolden triller desværre fordi hun jo sparker til den.  
*The ball rollPRS unluckily because she __ kickPRS  it.*  
‘The ball is rolling unfortunately because she is kicking it’

b. Bolden triller måske fordi hun jo sparker til den  
*The ball rollPRS maybe because she __ kickPRS  it.*  
‘The ball is rolling maybe because she is kicking it’

The interpretation of (4a) is necessarily that the causal relation is judged unfortunate, not the fact that the ball is rolling. And in (4b) the causal relation is judged probable, not the fact that the ball is rolling. 

*Fordi* + subordinate clause establishes a cause-effect relation between events, as brand new, so to say, the claim being that this causal relation exists. The accepted speech act values are the reality-types, constative, assumption and evaluation, but it is a statement of, an assumption of or an evaluation of the causal relation.

3.2 *Fordi* in concessives

It is the event-relating property that enables *fordi* to make a concessive, which it does the special circumstance being that the effect in the cause-effect relation be negated, (5):

(5) du siger jo selv at fordi jeg er arbejdsløs, så er jeg ikke doven, vel.  
*You say yourself that because I am unemployed then am I not lazy, __*  
‘You say yourself that although I am unemployed, I am not lazy, am I.’

If there is no negation of the effect, there is no concession involved (6):

(6) - Cyklister uden lys?  
*Bicycle riders without light*  
‘Bicycle riders without light?’

- Ja, de tror åbenbart fordi der er gadelys, så er det helt  
*Yes, they think apparently because there are lamp posts then is it quite*  
*all right, but that is it damn not.*  
‘Yes, they apparently think that because there are lamp posts it is quite all right, but damn it is not.’

In the concession *fordi* also establishes a causal link between two events, but as the negation signals that the caused event did not occur, the
interpretation must turn concessive. This is a consequence of fordi’s basic event-relating function.

4. Siden and når nu
Siden always introduces a subordinate clause. It only accepts the wish type speech acts or the assumption in the utterance, that is the non-factuality. (7) is a parallel to (3):

(7) Gå i seng siden du er træt.
    GoIMP to bed since you are tired.
    ‘Go to bed since you are tired’

Paraphrased: I can ask you to go to bed because you are tired. And the rolling of the ball realised with a siden causal relation must be interpreted as an assumption, (8):

(8) Bolden triller siden hun sparker til den.
    The ball rollPRS since she kickPRS it.
    ‘The ball is probably rolling since she is kicking it’

Theoretically (8) is interesting because it is siden that triggers the speech act value assumption in the main clause. If there is a probability adverb in the main clause, its scope is on the propositional content, and it is merely stating explicitly what kind of assumption it is, like måske in (9):

(9) Bolden triller måske siden hun sparker til den.
    The ball rollPRS probably since she kickPRS it.
    ‘The ball is probably rolling since she is kicking it’

Siden thus establishes a causal relation between an event and a speech act, paraphrased: I can wish / assume event Y because event X. It presupposes a cause-effect relation between the two events referred to by the propositional content in the clauses, it states the cause as a fact and presents the effect as a non-fact, i.e. either as a non-reality or as a possibility, in the conclusion.

It would seem that siden belongs to the spoken language, my search in a written language corpus\(^2\) gave no instances of the causal use of siden (in Danish siden also has a temporal meaning corresponding to the English since). Når nu, roughly corresponding to ‘as now’, når being a polysemous conjunction denoting both time (‘when’) and cause (‘as’), functions exactly

\(^2\) Corpus 2000, Dansk Sprog- og Litteraturselskab.
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like *siden* in both written and spoken language. (10) and (11) are written language samples, (12) is from spoken language:

(10) **Når nu** vi kan gøre det hurtigere, så lad os gøre det. 
*As now we can do it quicker, then let us do it*

‘Since we can do it quicker, then let’s do it.’

(11) Men det er **vist** ikke modstandernes opgave at sørge for, **når nu** de har

*But it is probably not the opponents’s task to see to, as now they have*

Danmarks bedste og mest vidende fodboldtræner i Brøndby. 
*Denmark’s best and most skilled soccer couch in Brøndby.*

‘But it is probably not the opponents’s task to see to that, since Brøndby has the best and the most skilled soccer couch in Denmark.’

(12) Til sidst skal jeg lige høre hvordan I opfatter det ‘jyske’ i Jyske Bank **når nu** I sidder på Sjælland?

*At last will I just hear how you regard the ‘Jutlandish’ in Jutland Bank as now you sitPRS on Sealand?*

‘Lastly, I would just like to know how you regard the ‘Jutlandish’ in Jutland Bank, since you are on Sealand?’

In (10) the *når nu* clause gives the reason for the speech act request in the main clause, in (11) the sentence adverb *vist* indicates makes the assumption explicit, in (12) the reason is given for asking the question in the main clause. *Siden* and *når nu* establishes a causal relation between an event and the speech act in the main clause, and the use is restricted to speech act types whose propositional content is non-factual, either the wish type or the assumption.

5. **For**

*For* conjoins two main clauses, and it always establishes a causal relation between speech acts and not between events.

(13) ja, ja, altså, skal jeg være helt ærlig, jeg er rystet over hvis de får så meget i løn de der ingeniører, **for** så meget er de ikke værd, altså

‘Frankly, I’m shocked if those engeneers are paid that much in the private business world because they are not worth that much.’
Paraphrased: The reason why I’m shocked is that I can state as a fact that. With for one can establish a causal relation between an assumption and an assumption (the informant is talking about an add from the supermarket chain called Kvickly, the add represents two women in a kitchen), (14):

(14) Jeg tror ikke Kvickly, dem der har lavet reklamen, ville vælge at folk skulle tro at de er lesbiske, for det tror jeg ikke ligefrem de har lyst til at have som image, det er for kontroversielt
‘I don’t think that Kvickly, those who made the add, would want people to think that they are lesbian because I don’t think that they would want to have that as an image, it is too controversial’

Paraphrased: I don’t assume because I don’t assume. For establishes a causal relation between two speech acts, and the only restriction is that the for utterance can not be the wish type speech act, (15) and (16):

(15) *Jeg synes I skulle tage sydpå, for Ø nyd solen hvor den er
‘I think you should go south because enjoy the sun where it is’

(16) *Du skulle tage en tur sydpå, for Ø savner du varmen?
‘You should take a trip south because do you miss the heat?’

This would be due to the non-reality of the propositional content in the wish type speech acts, and from an argumentative point of view it would not be surprising that a non-event can not function as a premise in an argument. Interrogatives are in fact possible:

(17) og jeg siger til vedkommende sagsbehandler i kommunen at jeg er sgu også bekymret, for (Ø) kan det her blive ved, sagde jeg, jeg fik jo sygeløn.
‘and I say to this social worker in the municipality that I’m worried because can this continue, I said, I got sickness allowance’
But interrogatives are only possible when they do not function as genuine questions but as rhetorical questions which, in speech act terms, are constatives. The rhetorical interpretation is impossible in (16) and therefore it is ungrammatical.

Like siden, for presupposes a causal relation between two events, and for elaborates on it establishing a causal relation between speech acts. This is apparently due to the fact that for conjoins two main clauses, the main clause status being the prerequisite for speech act value, but it should be attributed to the semantics of for too, because fordi also conjoin two main clauses, but it does not always establish a causal relation between speech acts.

6. Fordi + main clause
Fordi also conjoins two main clauses, in spoken language it is often followed by a short pause. Fordi can do exactly what for does, namely establish a causal relation between speech acts, it is always possible to replace a for by a fordi without altering the relation. This would be due to the main clause status. But one can not always replace a fordi introducing a main clause by a for, and this is in cases where fordi establishes a causal relation between events as it does when it introduces the subordinate clause. In (18) the informant establishes a causal relation between the going home event and the frowning event, and again between the hurting back event and the going home event:

(18) det der pres man hele tiden havde over hovedet, og sine arbejdskolleger som hele tiden skævede til en fordi nu tog man hjem, fordi nu havde man ondt i ryggen og kunne ikke være der mere

‘You constantly were under pressure, and the colleagues who always frowned at you because you went home because your back was hurting and you couldn’t stand it anymore.’

Fordin has another advantage on for, because the fordi-clause can be clefted out, the effect being that the causal relation is focused. In that case the fordi-clause functions as an adverbial predicative. When clefted out the fordi-clause can maintain its main clause word order and thus maintain its speech act value, like i (19):
Det er også fordī man er ikke selv klar over hvad det egentlig er, det er man ikke.

‘It is also because you don’t know yourself what it really is, you don’t.’

In my spoken language corpus all informants use both for and fordī, but fordī has the potential of replacing for as it accepts both subordinate and main clause word order and hence both relates events and speech acts. I would not be able to judge if such a replacement is in fact going on, but should it be the case Danish would get the English simplification – both for and fordī translate perfectly well into because.

7. Conclusion
I have shown that the causal conjunctions for, siden and fordī divide the argumentative jobs between them in virtue of what kind of clause type they can conjoin and in virtue of the kind of content they conjoin. Fordī+ subordinate clause establishes a causal relation between events, it establishes a cause-effect relation. Siden establishes a causal relation between an event and a speech act, in casu a wish or an assumption. For only establishes a causal relation between speech acts, which fordī+ main clause is also able to do. Fordī+ main clause further keeps the ability to relate events, and determining what it does in the individual case is a matter of interpretation. The fordī-clause (both subordinate and main) can be clefted out, the effect being that the causal relation itself is focused.

References:
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