Places

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Abstract

In Norwegian, a locative PP can occur as the subject of the copula just in case the complement of the copula is a relative construction with *sted* or *plass*, both meaning 'place', as its head noun. I examine the properties of this construction and ultimately propose an analysis based on a specific view of locative PPs as well as a novel assumption about the ways A-movement and A'-movement may interact.

1 Introduction

In this article, I will look at some curious properties of Norwegian sentences like those in (1)-(2):¹

- (1) I Tromsø er et bra sted å bo. In Tromsø is a nice place to live
- (2) I Tromsø er et sted det er morsomt å arbeide. In Tromsø is a place it is fun to work

I will present evidence that the initial PPs in (1)-(2) are in the usual subject position. After rejecting an alternative analysis in section 3, I will also argue that these PPs are derived subjects raised to the subject position of the copula from inside the relative clause² and will discuss the theoretical issues that arise from this (section

(i) I Tromsø er det et bra sted å bo. in Tromsø is it a nice place to live.

¹The meaning is not 'In Tromsø there is a nice place to live' which would be the meaning of (i).

 $^{^2}$ I take *et bra sted å bo* in (1) to contain an infinitival relative clause, ignoring the question how such constructions relate to Tough Movement constructions like *Dette stedet er bra å bo på* – 'This place is nice to live in'. The fact that the stranded preposition cannot be left out in the Tough Movement constructions (see the comments on example (35) in section 4.1) suggests that the relation cannot be too tight.

4).

A key fact about sentences like (1)-(2) is that the head noun of the relative construction must be *sted* or *plass*, which both means 'place'.³ Correspondingly, a key element in the analysis I suggest, is the special status of these nouns in the formation of locative expressions.

2 Some basic facts

I will begin by identifying the special properties that sentences like (1)-(2) have.

2.1 Spatial PPs as subjects of copulative sentences

In (1)-(2) (repeated below as (3)-(4)), the locative PP i $Troms\phi$ 'in Troms ϕ ' is linked by the copula to a predicate consisting of a relative clause headed by a noun:

- (3) I Tromsø er et bra sted å bo. In Tromsø is a nice place to live.
- (4) I Tromsø er et sted det er morsomt å arbeide. In Tromsø is a place it is fun to work.

The usual tests suggest that the PP is really the subject:

- (5) a. Derfor er i Tromsø blitt et bra sted å bo. therefore is in Tromsø become a nice place to live.
 - b. Nå er i Tromsø blitt et sted det er morsomt å arbeide. now is in Tromsø become a place it is fun to work.
- (6) a. I Tromsø synes å være et bra sted å bo. in Tromsø seems to be a nice place to live.
 - b. I Tromsø påstås å være et sted det er morsomt å arbeide. in Tromsø is.claimed to be a place it is fun to work.
- (7) a. I Tromsø mener vi (*at) er et bra sted å bo. in Tromsø think we (*that) is a nice place to live.
 - b. I Tromsø synes vi (*at) er et sted det er morsomt å arbeide. in Tromsø think we (*that) is a place it is fun to work.

³Plass can replace sted in (1)-(2), as in (i)-(ii), and all other grammatical examples in the text:

⁽i) I Tromsø er en bra plass å bo. in Tromsø is a nice place to live.

⁽ii) I Tromsø er en plass det er morsomt å arbeide. in Tromsø is a place it is fun to work.

The examples in (5) show that the PP appears between an auxiliary in the V2-position and a participle just like ordinary subjects. Those in (6) show PPs undergoing raising-to-subject, and the examples in (7) illustrate the *that-trace effect triggered by extraction of PPs like those in (1)-(2).⁴

2.2 The importance of the relative clause

The relative clause is essential:

- (8) *I Tromsø er et bra sted nord for Polarsirkelen. in Tromsø is a nice place north of the Arctic Circle.
- (8) contrasts with (9), where the subject is not a PP:
- (9) Tromsø er et bra sted nord for Polarsirkelen Tromsø is a nice place north of the Arctic Circle.

2.3 The importance of the head noun

It is also essential that the head noun of the relative clause be sted or plass (both 'place'):

- (10) a. *I Tromsø er en bra by å bo. in Tromsø is a nice city to live.
 - b. *I Tromsø er en by det er morsomt å arbeide. in Tromsø is a city it is fun to work.

This is presumably related to the fact that *sted* and *plass* are the only nouns that can form a locative adjunct without a (overt) preposition:

- (11) a. Vi arbeidet (på) det samme stedet/den samme plassen i tre år. we worked (at) the same place for three years.
 - b. Vi har nettopp besøkt et sted/en plass vi bodde (på) i 1981. we have just visited a place we lived (at) in 1981.
- (12) a. Vi arbeidet *(i) den samme byen i tre år. we worked *(in) the same city for three years.
 - b. Vi har nettopp besøkt en by vi bodde *(i) for ti år siden. we have just visited a city we lived *(in) ten years ago.

⁴Norwegian speakers show variation with respect to **that*-t effect. Speakers who tolerate at 'that' in *Hvem tror du at har vunnet?* 'who think you that has won etc., should also allow it in (7).

2.4 No stranded preposition in the relative clause

If a stranded preposition is inserted into the relative clause in (10), just as in (12-b), the outcome is still ungrammatical, in contrast with (14):

- (13) a. *I Tromsø er en bra by å bo i. in Tromsø is a nice city to live in.
 - b. *I Tromsø er en by det er morsomt å arbeide i. in Tromsø is a city it is fun to work in.
- (14) a. Tromsø er en bra by å bo i. Tromsø is a nice city to live in.
 - b. Tromsø er en by det er morsomt å arbeide i. Tromsø is a city it is fun to work in.

Likewise, the stranded preposition which is optional in (11-b), makes (1)-(2) ungrammatical:

- (15) a. *I Tromsø er et bra sted å bo på. in Tromsø is a nice place to live at.
 - b. *I Tromsø er et sted det er morsomt å arbeide på. in Tromsø is a place it is fun to work in.

In this case, the subject must lose its preposition exactly as in (14) and (9):⁵

- (16) a. Tromsø er et bra sted å bo på. Tromsø is a nice place to live at.
 - b. Tromsø er et sted det er morsomt å arbeide på. Tromsø is a place it is fun to work at.

2.5 Summary

The data I have reviewed, gives rise to the following questions:

- (17) a. Why must the predicative noun be *sted* or *plass* when the subject of the copula is a PP?
 - b. Why must there be a relative clause modifying the predicative noun?
 - c. Why can't there be a stranded preposition in the relative clause?

- (i) a. Tromsø er et bra sted å bo. Tromsø is a nice place to live.
 - b. Tromsø er et sted det er morsomt å arbeide. Tromsø is a place it is fun to work.

⁵These sentences are also fine without a stranded preposition in the relative clause, just like (1)-(2):

In the next section, I will sketch two ways of providing answers to these questions. Both ultimately turn on where PPs can be introduced by external merge, but make different assumptions as to where exactly that is.

3 Two analytical options

The first analysis suggested below answers question (17-a) by saying that when the subject of the copula is a PP, the complement of the copula must be a PP as well. Then, the contrast between (1)-(2) and sentences like (10) follows, if *sted* and *plass* license a silent locative P, but no other noun does, as suggested by the contrast between (11) and (12). However, this account requires untenable auxiliary assumptions to provide answers to (17-b)-(17-c). The second analysis answers questions (17-b)-(17-c) directly by claiming that a PP subject must be a derived subject, but an answer to (17-a) will only be forthcoming in section 4.

3.1 Categorial matching

Suppose we take the grammaticality of (18) without $p\mathring{a}$ to mean that *sted* and *plass* allow a locative preposition to be silent:

- (18) a. Vi arbeidet (på) det samme stedet/den samme plassen i tre we worked (at) the same place for three år.

 years.
 - b. Vi har nettopp besøkt et sted/en plass vi bodde (på) i 1981 we have just visited a place we lived (at) in 1981.

In (19), P represents the silent locative preposition:

- (19) a. Vi arbeidet P det samme stedet/den samme plassen i tre we worked the same place for three år. years.
 - b. Vi har nettopp besøkt et sted/en plass vi bodde P i 1981. we have just visited a place we lived in 1981.

Then, the obligatoriness of the overt preposition in (12) (repeated below as (20)) may be taken to show that only *sted* and *plass* license a silent P:

- (20) a. Vi arbeidet *(i) den samme byen i tre år. we worked *(in) the same city for three years.
 - b. Vi har nettopp besøkt en by vi bodde *(i) for ti år siden. we have just visited a city we lived *(in) ten years ago.

Correspondingly, (1)-(2) might be taken to contain silent prepositions too, as in (21):

(21) a. I Tromsø er [PP P et bra sted å bo.] in Tromsø is a nice place to live.
b. I Tromsø er [PP P et sted det er morsomt å arbeide.] in Tromsø is a place it is fun to work.

But (10) - repeated below as (22) - may not:

- (22) a. *I Tromsø er en bra by å bo. in Tromsø is a nice city to live.
 - b. *I Tromsø er en by det er morsomt å arbeide. in Tromsø is a city it is fun to work.
- (23) a. *I Tromsø er [PP P en bra by å bo.] in Tromsø is a nice city to live.
 b. *I Tromsø er [PP P en by det er morsomt å arbeide.] in Tromsø is a city it is fun to work.

Then, the ungrammaticality of (22) might be due to a mismatch between the category of the subject and the category of the complement of the copula:

(24) a. [PP I Tromsø] er [DP en bra by å bo.] in Tromsø is a nice city to live.
b. [PP I Tromsø] er [DP en by det er morsomt å arbeide.] in Tromsø is a city it is fun to work.

It should be clear that this approach does not presuppose that er 'is' has the semantics of an 'identificational copula'. In fact, er is to be regarded as an identity function passing on the denotation of its complement. The complement of er, then, is the predicate that would have to be applicable to the subject, but the type of things the predicate applies to may be determined by its syntactic category. Thus, the analysis we are examining is ultimately based on the assumption that the syntactic categories DP and PP correspond to different semantic types.⁶

But to answer question (17-b), we must also assume that a preposition cannot be merged to the complement of the copula so that (8) (below as (25)) cannot be analyzed as in (24):

(25) *I Tromsø er et bra sted nord for Polarsirkelen. in Tromsø is a nice place north of the Arctic Circle.

⁶Sentences like $Troms\phi$ er i Nord Norge 'Tromsø is in Northern Norway' are fine. In these, er can be replaced with ligger 'lies' or 'is situated', an option not available when the subject is a PP as in (1)-(2) or when er has an adjectival complement. That is, er 'is' can also be assigned a meaning such that its complement is not predicated of the subject the way it is in (1)-(2).

(26) $[PP \ I \ Troms\emptyset]$ er $[PP \ P \ et$ bra sted nord for Polarsirkelen] in TromsØ is a nice place north of the Arctic Circle.

Then, (1)-(2) must be derived as indicated in (27):

- (27) a. $[PP \ I \ Troms\emptyset]$ er $[PP \ P \ et$ bra sted] å bo [PP] in $[PP \ I \ Troms\emptyset]$ is a nice place to live
 - b. $[PP \mid Troms\emptyset] \text{ er } [PP \mid P] \text{ et sted} \text{ det er morsomt å arbeide}$ in $Troms\emptyset$ is a place it is fun to work PP

If so, we also have answer to question (17-c). Given the stranded preposition, the sentences in (15) (below as (28)) must parsed as in (29):

- (28) a. *I Tromsø er et bra sted å bo på. in Tromsø is a nice place to live at.
 - b. *I Tromsø er et sted det er morsomt å arbeide på. in Tromsø is a place it is fun to work in.
- (29) a. $[PP \ I \ Tromsø] \ er [PP \ I \ DP] \ et \ bra \ sted] å bo <math>[PP \ på \ DP]$ in Tromsø is a nice place to live at
 - b. $[PP \ I \ Troms\emptyset]$ er $[PP \ I \ Troms\emptyset]$ er $[PP \ I \ Troms\emptyset]$ a place it is fun to work $pa \ DP$ at

But the derivation indicated in (27) would be a 'head raising' derivation of the relative constructions where the raised constituent is a PP, and although the head raising analysis may be justified when the head is a NP or DP (see section 4.3 below), extending it to PPs raises a number of problems. In particular, it begs the question why the silent P in (27) cannot be replaced with an overt preposition:

- (30) a. *I Tromsø er på et bra sted å bo. in Tromsø is at a nice place to live.
 - b. *I Tromsø er på et sted det er morsomt å arbeide. in Tromsø is at a place it is fun to work.

In fact, head-raising must be allowed to pied-pipe a preposition only when the complement of the preposition is a wh-phrase. Thus, (31-a) is acceptable (in a formal register), but (31-b) is not:

- (31) a. Vi fant et sted på hvilket det er morsomt å arbeide. we found a place at which it is fun to work.
 - b. *Vi fant på et sted det er morsomt å arbeide. we found at a place it is fun to work.

Hence, the matching account seems to rest on untenable assumptions.

3.2 The subject PP comes from the relative clause

The second line of analysis I will look at, is based on the assumption that a PP may not appear in the subject position of the copula by external merge. This may follow from proposals like those in Kayne (1999), which, among other things, are designed to account for subject/object asymmetries with respect to prepositional complementizers.

If so, we are led to conclude that a subject PP is always a derived subject, a PP formed below the subject position and subsequently raised, as in sentences with 'locative inversion'. But then the PP subject in (1)-(2) must be a derived subject too.

When we ask where the subject PP in (1)-(2) comes from, the only possible answer seems to be that it actually has been extracted from the relative clause:

(32)
$$[PP \text{ i Troms}\emptyset] \text{ er } [\text{ et bra sted å bo } PP]$$
 = (1) in Troms \emptyset is a nice place to live

This analysis provides a straightforward explanation why (8) and (15) (both below) are ungrammatical:

- (33) *I Tromsø er et bra sted nord for Polarsirkelen. in Tromsø is a nice place north of the Arctic Circle.
- (34) a. *I Tromsø er et bra sted å bo på. in Tromsø is a nice place to live at.
 - b. *I Tromsø er et sted det er morsomt å arbeide på. in Tromsø is a place it is fun to work in.

In (33), there is no position the subject PP could have moved from, since there is no constituent modifiable by a PP. In (34), there is a position modifiable by a PP (the VP headed by *bo* 'live'), but the subject PP cannot have moved from that position, since there is a stranded P. Thus, we have answers to the questions (17-b)-(17-c).

On the other hand, the new analysis does not yet provide an answer to question (17-a), i.e. it doesn't explain why no other noun can replace *sted* or *plass* in (1)-(2). It also raises the question how a locative PP manages to raise to the subject position of the copula from inside a relative construction. In the next section, however, I will suggest an answer to this question which also leads to an answer to question (17-a).

3.3 Summary

I began this section by sketching an apparently simple account of (1)-(2) based on categorial matching, This account would provide an answer to question (17-b), but cannot answer questions (17-a) and (17-c) without adding assumptions that were seen to be untenable. Thus, I suggested a different analytical option based on the assumption that the PP subject in (1)-(2) must be a derived subject moved out of the relative clause. This analysis will be more fully developed in the next section.

4 The proposal

To develop the analysis sketched in section 3.2, I will first attempt to capture what is special about *sted* and *plass*. This will provide a way of understanding how a locative PP can move out of the relative clause in the derivation of (1)-(2) just in case the head of the relative construction is *sted* or *plass*.

4.1 What's special about sted?

Saying that *sted* and *plass* can be locatives without an overt preposition because they have the unique property of licensing a silent locative preposition, seems to beg the question why exactly only *sted* and *plass* should have this property. There is also an empirical issue. Consider first (35), where the stranded preposition cannot be omitted:

(35) Dette stedet er bra å bo *(på). this place is nice to live at.

(35) with the stranded preposition is simply a Tough Movement construction with a stranded preposition analogous to *This problem is hard to talk about*. But why couldn't (35) without $p\mathring{a}$ 'at' simply have a stranded silent P instead of $p\mathring{a}$?

The answer to that might be that the P cannot remain silent when stranded. But then we have a problem with the following:

- (36) a. Vi besøkte et sted vi hadde bodd i fem år. we visited a place we had lived for five years.
 - Tromsø er et bra sted å bo.
 Tromsø is a nice place to live.

In these, *sted* originates as (part of) a locative modifier in the relative clause. If *sted* can only be a locative modifier when accompanied by a silent or overt preposition, there must be a silent P in (36) which is either stranded or has been carried along under relativization (assuming for the sake of the argument that the head-raising analysis can be extended to PPs in spite of the problem noted in section 3.1). If we conclude from (35) that a stranded preposition cannot be silent, we must also say

that the P associated with *sted* actually has been pied-piped in (36). But this runs up against the problem that overt prepositions cannot be pied-piped in this way in sentences otherwise similar to (36):

- (37) a. Vi besøkte en by vi hadde bodd i i fem år. we visited a city we had lived in for five years.
 - b. *Vi besøkte i en by vi hadde bodd i fem år. we visited in a city we had lived for five years.

This may be due either to the way movement works in the derivation of relatives (that is, a P can be pied-piped only when its complement is a wh-phrase) or to the fact that $bes\phi ke$ 'visit' selects a DP complement, while relativizing a PP as in (37-b) makes it impossible to analyze the relative construction as a DP. Either way, we are now led to conclude that a silent P associated with sted in (36) can be neither stranded nor pied-piped. In other words, there cannot be a silent P associated with sted in (36).

This leads me to abandon the idea that *sted* and *plass* functioning as locative modifiers must come with a silent *P*. Instead, I submit that these nouns are able to be locative modifiers without a preposition (silent or otherwise) because they are inherently locative, i.e. because they mean 'place'.

Putting this in slightly more precise terms, I propose that a noun whose meaning is just 'place' can be used as a locative modifier providing a spatial coordinate for an eventuality without needing a preposition to create this relation. This is in fact what we see in (36).

From this point of view, what sets *sted* and *plass* apart from by 'city' and other nouns, is that only the former can be pure expressions of location.

4.2 Places and things

Given the preceding, one may well wonder why *sted* ever co-occurs with a locative preposition, as it optionally does:

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(38) Vi bodde (på) et sted i Nord-Norge. we lived (at) a place in Northern Norway.
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To approach this question, we should first ask the question what the preposition is actually doing in sentences like (39):

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(39) Vi bodde *(i) en by i Nord-Norge.
we lived *(in) a city in Northern Norway.
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I have already suggested that a locative preposition is not always needed to license a locative modifier. I will now propose that locative prepositions create a relation between a purely place-denoting noun and another noun. In (39), the other noun is by, and I suggest that the structure of i en by 'in a city' is roughly as in (40):

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(40) [STED [i [en by]]] place in a city
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That is, i 'in' assigns a space denoted by silent *sted* in its Spec as the location of the city picked as the denotation of en by 'a city'. The difference between i 'in' and $p\mathring{a}$ 'on, at' is that i associates this space with the interior of an object denoted by its complement, while $p\mathring{a}$ associates it with the surface of that object. But the preposition is not otherwise instrumental in creating a locative modifier. Only *sted* is. Thus, *sted* as a locative modifier does not need a preposition when its denotation is not to be associated with the denotation of another noun phrase. Therefore, (38) without $p\mathring{a}$ 'at' can be analyzed as in (41), without a silent P:⁸

(41) Vi
$$[VP]$$
 bodde $[NP]$ et sted i Nord-Norge $[VP]$ we lived (at) a place in Northern Norway

The fact that the preposition $p\mathring{a}$ may nevertheless occur in (38), can then be accounted for by attributing two distinct interpretations to sted: It can denote a space, as in (41), but it can also denote a 'thing' (located in some space), just like by 'city'. On the second interpretation, it can only be a locative modifier by having the preposition $p\mathring{a}$ associating it with a space-denoting STED just as in (40):

(42) Vi [
$$_{VP}$$
 bodde [STED [på [$_{NP}$ et sted i Nord-Norge]]] we lived (at) a place in Northern Norway

Returning now to the fact that the stranded preposition cannot be omitted in (35) (repeated below as (43)), I tentatively suggest that the subject of a Tough Movement construction may denote 'things', but not spaces:

(43) Dette stedet er bra å bo *(på). this place is nice to live at.

Then, $p\mathring{a}$ is obligatory in (43) for the same reason as in (39).

4.3 The head-raising analysis of relative constructions

To complete the analysis of sentences like (36) (repeated below as (44)) and explain the contrast between (44) and (45), we need to adopt the head-raising analysis of relatives advocated by Vergnaud (1974) and Kayne (1994) among others.

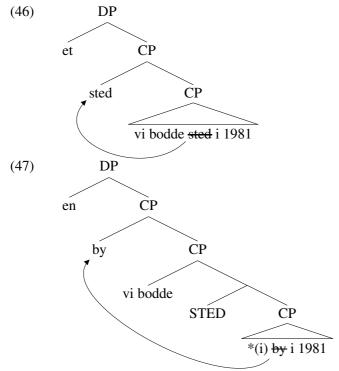
(44) a. Vi besøkte et sted vi hadde bodd i i fem år. we visited a place we had lived in for five years.

⁷The distribution of $p\mathring{a}$ 'on, at' vs. i 'in' raises additional issues that will be ignored here. For example, place names denoting cities in the inland or islands admit $p\mathring{a}$, e.g. $p\mathring{a}$ Hamar, $p\mathring{a}$ Island 'in Hamar, on Iceland', while names of coastal cities require i. e.g. i Oslo, i Troms ϕ .

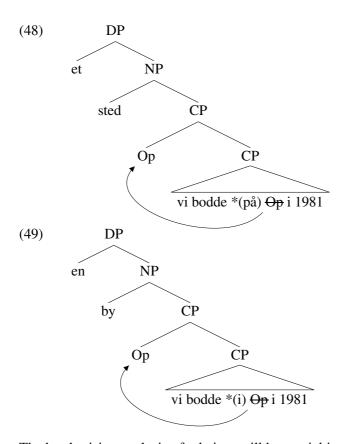
⁸I abstract away from V2 movement and the question whether et 'a' is a D or part of NP, which seems immaterial at this point.

- b. Tromsø er et bra sted å bo. Tromsø is a nice place to live.
- (45) a. Vi besøkte en by vi hadde bodd *(i) i fem år. we visited a place we had lived for five years.
 - b. Tromsø er et bra sted å bo *(i). Tromsø is a nice place to live in.

The contrast between (44) and (45) follows immediately on the head-raising analysis:



But on a derivation involving operator-movement, the difference between *by* and location-denoting *sted* is neutralized at the point of the derivation where the decision to merge a preposition must be made:



The head-raising analysis of relatives will be crucial in what follows.

4.4 Where does sted come from in (1)-(2)?

On the head-raising account of relative constructions, the analysis sketched in 3.2 seems to run up against a serious problem: Where does *sted* 'place', the head of the relative clause in (1)-(2) (below as (50)-(51)), come from, if the subject PP originates as a locative modifier inside the relative clause?:

- (50) I Tromsø er et bra sted å bo. In Tromsø is a nice place to live.
- (51) I Tromsø er et sted det er morsomt å arbeide. In Tromsø is a place it is fun to work.

In particular, it would seem as if *sted* and *i Troms* ϕ cannot both start out as locative modifiers in the relative clause. But in section 4.2, I proposed that a silent STED occurs inside locative PPs as in (52):

(52) [STED [i [en by]]] place in a city

Taking STED to be a regular syntactic object in (52), in fact a noun phrase, we can now entertain the possibility that movement can apply to it. If so, the structure of (50)-(51) at a point of the derivation where the PP has not yet raised to the subject position, may be as in (53), still assuming the head-raising analysis of relatives:⁹

- (53) a. er [$_{DP}$ et bra [$_{CP}$ **sted** [å bo [sted [i [Tromsø]]]]]]] is a nice place to live in Tromsø
 - b. er [$_{DP}$ et [$_{CP}$ **sted** [det er morsomt å arbeide [sted [i [Tromsø is a place it is fun to work in Tromsø]]]]]]

(I'm assuming that *sted* can only be silent when it remains in the Spec of a preposition.)

Then, either the remnant [sted [i [Tromsø]]] or just [i [Tromsø]] raises to the subject position. Assuming that the remnant raises, (50)-(51) are parsed as in (54):

- (54) a. [$\frac{\text{sted}}{\text{i}} [\text{Tromsø}]]] \text{ er } [DP] \text{ et bra } [CP] \text{ sted } [\text{å bo } \frac{\text{sted}}{\text{sted}} [\text{i}] \text{ Tromsø}]$
 - in Tromsø is a nice place to live in Tromsø
 - b. [sted [i [Tromsø]]] er [$_{DP}$ et [$_{CP}$ sted [det er morsomt å arbeide [sted[i [Tromsø]]]]]]

in Tromsø is a place it is fun to work in Tromsø

Notice that a parallel derivation is not available to (10) (here as (55)): On the assumptions made in section 4.2, no noun other than *plass* 'place' can replace STED in (52):

Deciding between the options will in part turn on determining the structure of *et bra sted i Tromsø* 'a nice place in Tromsø' in sentences in like (iii):

(iii) Vi fant et bra sted i Tromsø. we found a nice place in Tromsø.

⁹In (53)-(54), the indefinite article et and the adjective *bra* are taken to be merged onto the relative CP, like the definite article *the* in Kayne's (1994) analysis of relatives, but it may also be possible to replace (53) with (i) or (ii):

⁽i) er [$_{CP}$ [$_{NP}$ et bra **sted**] [å bo [$_{NP}$ et bra sted] [i [Tromsø]]]]]] is a nice place to live in Tromsø

- (55) a. *I Tromsø er en bra by å bo. in Tromsø is a nice city to live.
 - b. *I Tromsø er en by det er morsomt å arbeide. in Tromsø is a city it is fun to work.

Thus, (55) is excluded because by 'city' has no position in the relative clause to originate from. Notice also that on the analysis in 4.2, this still correlates with the fact that by cannot be a prepositionless locative, unlike sted ((56)-(57) are repeated from (11)-(12) above):

- (56) a. Vi arbeidet (på) det samme stedet/den samme plassen i tre we worked (at) the same place for three år.

 years.
 - b. Vi har nettopp besøkt et sted/en plass vi bodde (på) i 1981. we have just visited a place we lived (at) in 1981.
- (57) a. Vi arbeidet *(i) den samme byen i tre år. we worked *(in) the same city for three years.
 - b. Vi har nettopp besøkt en by vi bodde *(i) for ti år siden. we have just visited a city we lived *(in) ten years ago.

Thus, our current set of hypotheses also provides a satisfactory answer to question (17-a).

4.5 Locality and minimality

We are still left with the problem that the analysis in section 3.2 must allow the PP to undergo A-movement out of relative clause.

In the derivation leading to (1)-(2) via the structures in (54), the PP moves to an A-position from a position inside the relative clause. This is of course at odds with standard assumptions. Relative constructions are generally assumed to be islands for any kind of movement. In addition, A-movement is not expected to cross intervening A-positions such as the covert subject of the infinitive in (54-a) (not shown in the representations) and the expletive subject *det* 'it' in (54-b). This is in fact what Relativized Minimality is designed to exclude. The proposal in 4.4 suggests a solution. The basic intuition is that the A-movement of the PP leading to (54) is in a sense parasitic on the A'-movement of *sted* 'place'.

Taking island conditions and minimality as constraints on derivations, I want to suggest that since A'-moved sted is subextracted from [sted [i [Tromsø]]], the remnant [sted [i [Tromsø]]] can be accessed by movement as if it were sitting in the same position as the previously moved *sted*.

An immediate objection to this might be that *sted* is moved to an A'-position (Spec-CP, on our analysis inherited from Kayne (1994)) so that moving the rem-

nant as if it were sitting in that position would make the movement of the remnant to the subject position similar to improper movement. However, if 'relative clause extraposition' is analyzed as the outcome of movement of the 'head' of a relative construction (stranding the rest of the relative clause) as proposed by Kayne (1994), the grammaticality of sentences like (58) shows that the head noun can undergo A-movement:

(58) A man appeared who we had never seen before.

That is, although the head noun has raised to Spec-CP by A'-movement (on the head-raising analysis), it can still go on to raise to a subject position. Correspondingly, saying that the remnant containing the PP can raise to the subject position as in (52) because it can move as if it were in the position held by *sted*, the head noun of the relative construction, would appear less obviously incorrect.

Crucially, this derivation only gives rise to sentences where the location associated with the subject PP is co-extensive with the space denoted by *sted* 'place', as in (1)-(2). With the verb *ligge* 'lie, be located within', a subject must be associated with a proper subspace of the location denoted by the locative complement:

- (59) a. Tromsø ligger (på) et bra sted å bo. Tromsø lies (on) a nice place to live.
 - b. Tromsø ligger (på) et sted det er bra å bo. Tromsø lies (on) a place it is nice to live.

These are similar to:

(60) Tromsø ligger i Nord-Norge. Tromsø lies in Northern Norway.

Correspondingly, we correctly predict the impossibility of substituting *ligger* 'lies' for er in sentences like (1)-(2) (see footnote 6):¹⁰

- (61) a. *I Tromsø ligger et bra sted å bo. in Tromsø lies a nice place to live.
 - b. *I Tromsø ligger et sted det er morsomt å arbeide. in Tromsø lies a place it is fun to work.

¹⁰The sentences in (61) are fine with the initial PP as a fronted adverbial of the sort seen in *I Tromsø ligger Ishavskatedralen* 'In Tromsø lies The Arctic Cathedral'. The following are ungrammatical:

⁽i) *Nå ligger i Tromsø et bra sted å bo. now lies in Tromsø a nice place to live.

⁽ii) *I Tromsø synes å ligge et bra sted å bo. in Tromsø seems to lie a nice place to live.

5 Conclusion

In this article, I have primarily endeavored to characterize the puzzles surrounding the existence of Norwegian sentences like (1)-(2). I have also suggested a line of analysis that seems plausible to me, but clearly stands in need of much elaboration in order to fit into current syntactic theories.

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