Agreement and reconstruction correlate in Swedish
Evidence from tough-constructions

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Abstract  This paper presents two novel findings: I show (i) that there is a strong connection between \(\phi\)-feature agreement and scope freezing in Swedish, and (ii) that Swedish tough-constructions (TCs) involve movement of the embedded object into the matrix subject position. Scope freezing is shown to take place in adjectival TCs, morphological passives and adjectival raising structures in Swedish, but not in verbal TCs, periphrastic passives or verbal raising constructions. The difference in scope possibilities in adjectival and verbal contexts is captured by analyzing movement induced by \(\phi\)-feature agreement (adjectival cases) as taking place in the syntax, and purely EPP-driven movement (verbal cases) as taking place post-syntactically. Following Sauerland and Elbourne (2002), it is assumed that reconstructed readings do not involve any undoing operation but reflect the position of an element prior to post-syntactic movement. Regarding TCs, I further show that adjectival and verbal TCs in Swedish are uniformly derived via long A’–A-movement of the underlying object into the matrix subject position. Since infinitival clauses in Swedish have been shown to have a smaller structure than a full CP (Engdahl 1986), movement of the object does not violate the Williams Cycle (Williams 2003) and is therefore not an instance of Improper Movement. Swedish TCs thereby share properties both with English TCs (A’-properties) and with German TCs (long movement), placing the Swedish ones in between.

Keywords  Reconstruction · \(\phi\)-feature agreement · tough-construction in Swedish · Long A’–A-movement

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1 Introduction

It is a well-known property of language that the surface structure does not always match the interpretation one-to-one. Moved elements, for instance, can in some cases be interpreted either in their derived position or in their base position (Postal 1974). Quantified subjects are a case in point, as they can often get both wide and narrow scope readings. In the raising context in (1), for instance, the existential quantifier can take scope either above or below the raising predicate.

(1) \[ \exists \text{likely} \text{, likely} \exists \text{likely} \text{, likely} \text{, likely} \exists \]

On the wide scope reading of (1), there is a woman such that she is likely to buy some particular dress in question, while on the narrow scope reading, it is likely that some woman (or other) will buy that particular dress.

It is generally assumed that reconstruction of a phrase is only possible into positions that the phrase has occupied at some stage of the derivation (see e.g. Romero 1998; Fox 1999; Sportiche 2006a). It follows, then, that a subject that cannot be interpreted scopally in the position where it appears to be assigned its \( \theta \)-role might never actually have appeared in that position (Chomsky 1993; see also Sportiche 2006b). Precisely this issue comes up in analyses of tough-constructions (TCs) (for discussion, see e.g. Fleisher 2013).

In English, TC subjects can only get a wide scope reading. Thus, despite the fact that the subject in (2) is thematically interpreted in the embedded object position, it does not reconstrcut into this position for scope (see e.g. Postal 1974; Epstein 1989).

(2) Few girls would be difficult for Jim to talk to.

\[ \text{few} > \text{difficult} \]

\[ \text{*difficult} > \text{few} \]

Postal 1974: 224

As indicated, the sentence in (2) has the reading that few girls \( x \) are such that it would be difficult for John to talk to \( x \), but lacks the meaning on which it is difficult for him to talk to a small group of girls. The reconstruction data in (2) seems straightforward enough: the absence of a narrow scope reading of the subject can be taken as support for analyses that take the matrix subject to be base-generated in the surface position (see among others Chomsky 1977; Browning 1989; Rezac 2006; Fleisher 2013, 2015; Keine and Poole 2016), and, conversely, to be problematic for analyses that assume movement into the subject position (see among others Rosenbaum 1967; Postal 1971; Brody 1993; Hornstein 2001; Hicks 2009; Hartman 2011a,b).

Swedish is particularly interesting in this context because different types of TC behave in different ways with regard to scope reconstruction. A preliminary division can be made between adjectival TCs, (3a), and verbal (and nominal) TCs, (3b). The former are like their English counterparts in only allowing for a surface scope reading, while the latter allow for both readings:

1The position where the matrix subject has its thematic interpretation is indicated with a co-indexed ___ in the TC examples. I also indicate whether the sentences are examples of adjectival, verbal or nominal TCs (aTC, vTC, nTC) just above or to the right of the example.
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\[(3)\]

a. få personer| är lätt-å för Johan att prata med ___1.\] [aTC]

Few people are easy for Johan to talk to.

\[\text{few} > \text{easy, } *\text{easy} > \text{few}\]

b. få personer| går lätt för Johan att prata med ___1.\] [vTC]

Few people go easily for Johan to talk to.

\[\text{few} > \text{easy, easy} > \text{few}\]

The sentence in (3b) can mean either that few people are such that each one of them is easy for Johan to talk to (wide scope reading), or that it is easy for Johan to talk to a small group of people (narrow scope reading). The sentence in (3a), in contrast, can only mean that few people are such that each one of them is easy for Johan to talk to.

To my knowledge, this difference in reconstruction ability of different types of TC in Swedish has not been discussed previously in the literature.\(^2\)

In fact, while the adjectival type of TC in (3a) has been examined to some extent before in Swedish, other types of TC (of which (3b) is just one example) have not received much attention. For instance, although Malmgren (1984) gives examples of some verbal TCs, his discussion is focused on adjectival ones. Similarly, Engdahl (2012) is concerned with properties of the non-reconstructing, adjectival type and concludes that TCs in Swedish have base-generated subjects. The contrast in reconstruction properties of different types of TC, (3b)–(3a), has thus not been noticed. If the ability to reconstruct indeed correlates with movement, as argued in, among others, Romero (1998), Fox (1999) and Sportiche (2006b), then the data in (3) seems to suggest two different derivations of TCs in Swedish. More precisely, those TCs that allow for reconstruction of the subject, (3b), would be derived via movement, while those that do not reconstruct, (3a), would involve a base-generated subject.

In this paper I will be concerned with the derivation of TCs in Swedish, but I will also look at correlations between morphological agreement and lack of reconstruction in Swedish more generally. Regarding TCs, I will argue against a solution with two derivations for these constructions and present evidence that both adjectival and verbal types are derived via movement from the embedded clause. Firstly, TCs behave uniformly when it comes to reflexive binding, indicating that the subject has moved. Secondly, those TCs that fail to reconstruct do so for independent reasons, I will argue, and not because they do not involve movement of the subject. Specifically, I will show that reconstruction is unavailable in Swedish more generally in contexts with morphological agreement between the subject and the predicate. The pattern observed for TCs, (3), thus holds also for passives and raising structures. It will be argued that morphological agreement arises from \(\phi\)-feature agreement between the subject and predicate in Swedish, and that cases without a morphological reflex as well as cases with a default morphological form do not involve \(\phi\)-feature agreement.

\(^2\)Malmgren (1984) discusses reconstruction differences for agreeing and non-agreeing adjectival TCs. The latter are however best analyzed as expletive-drop constructions, and not as TCs. I discuss this further in Sects. 2.2 and 2.4.
A subject that has agreed in \( \phi \)-features with its predicate is frozen in place for scope reconstruction purposes.

The paper is structured as follows: In Sect. 2, I begin by laying out the properties of TCs in Swedish, looking at predicate types, binding properties and scope reconstruction properties. As will be shown, both binding and scope provide evidence for movement into the subject position in TCs in Swedish. For the ability to reconstruct, however, it matters whether the predicate agrees morphologically with the subject or not. Section 3 therefore looks at morphological agreement in Swedish, both straightforward and unexpected agreement patterns. I argue that common gender and plural agreement marking arise as a result of \( \phi \)-feature agreement but that \( \phi \)-feature agreement is absent in other subject-predicate relations in Swedish. When \( \phi \)-feature agreement has taken place, the subject is frozen in place and necessarily gets wide (non-reconstructed) scope. I show that the proposed analysis of \( \phi \)-agreement and scope freezing carries over also to passives and raising constructions. In Sect. 4, I turn to the syntactic derivation of TCs. I argue that TCs are derived via a combination of A’- and A-movement of the underlying object into the matrix subject position.

## 2 Properties of TCs in Swedish

In this section, I look at the properties of TCs in Swedish in some detail. As TCs in Swedish differ in their ability to reconstruct depending on their type of predicate, I begin, in Sect. 2.1, with an overview of the different predicate types found. After that I turn to expletive-drop constructions in Sect. 2.2, as such constructions superficially look like TCs, but are distinct from these. Sections 2.3 and 2.4 discuss binding and scope properties of TCs.

### 2.1 Predicate types

Swedish has a number of TC types that differ in the form of their predicate: adjectival in (4a), nominal in (4b) and verbal in (4c)–(4h).\(^3\),\(^4\),\(^5\)

\[(4)\]  
\[
a. \quad [\text{Den här artikel-n}]_1 \text{ är svår att läsa } \_]_1. \quad [\text{be+adj}] \\
\text{This paper is difficult to read.} \\
\]
\[
b. \quad [\text{Den här artikel-n}]_1 \text{ är en mardröm att läsa } \_]_1. \quad [\text{be+DP}] \\
\text{This paper is a nightmare to read.} \\
\]

\(^3\)In English too, TCs can have adjectival, nominal or verbal predicates, see Lasnik and Fiengo (1974), Pesetsky (1987), Flickinger and Nerbonne (1992), Dalrymple and King (2000).

\(^4\)The following abbreviations are used in the glosses: CMN—common gender; NEUT—neuter gender; PL—plural; DEF—definite; ACC—accusative case; NOM—nominative case; GEN—genitive; REFL—reflexive pronoun; PASS—passive verb form; PTC—passive participle; PART—particle.

\(^5\)Common gender (glossed as CMN) is a non-neuter gender in the singular.
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c. [Den här artikel-n]₁ går långsamt att läsa ___½.  [go+adv]
   This here paper-CMN.DEF goes slowly to read
   ‘This paper is slow to read.’
d. [Den här artikel-n]₁ går att läsa ___½.  [go]
   This here paper-CMN.DEF goes to read
   ‘This paper is possible to read.’
e. [Den här artikel-n]₁ fungerar att läsa ___½.  [function]
   This here paper-CMN.DEF functions to read
   ‘This paper can be read.’
f. [Den här artikel-n]₁ tar en timme att läsa ___½.  [take+time]
   This here paper-CMN.DEF takes an hour to read
   ‘This paper takes an hour to read.’
g. [Den artikel-n]₁ kostar en förmögenhet att ladda ner ___½.  [cost+amount]
   That paper-CMN.DEF costs a fortune to download
   ‘That paper costs a fortune to download.’
h. [Den här artikel-n]₁ kostar på att läsa ___½.  [cost+particle]
   This here paper-CMN.DEF costs PART to read
   ‘This paper demands a lot (from its reader).’

Of the different TC types in (4), the adjectival and the verbal ones with gå (‘go’), (4c)–(4d), are particularly productive and can appear with almost any kind of infinitival complement. ⁶ The other types are more restricted.

There are structural differences between the TC types. In verbal TCs, the matrix verb forms an essential part of the tough-predicate and cannot be separated from its complement when a wh-question is formed. In adjectival TCs, the verb and the adjectival complement can be separated, as the verb is a copula and is not part of the tough-predicate. ⁷

6See Klingvall (2011).
7Although nominal TCs behave like verbal ones with regard to wh-question, (i), they are structurally more similar to adjectival ones. To many speakers, adjectival and nominal TC predicates are alike in that both can appear as complements of small clause taking verbs like anse (‘consider’), without vara (‘be’), (ii). This indicates that the verb is not part of the predicate in either case.

(i) * Vilken sorts mardröm att läsa är den här artikel-n?
   Which kind nightmare to read is this here paper-CMN.DEF
   ‘What kind of nightmare is this paper to read?’
(ii) Jag anser den här artikel-n svår/ en mardröm att läsa.
    I consider this here paper-CMN.DEF difficult.CMN/ a nightmare to read
    ‘I consider this paper difficult/a nightmare to read.’

The wh-question in (i) is ill-formed because it is not an appropriate question for the type of predicate present. When used as a predicate, mardröm does not have the literal meaning of ‘nightmare,’ but instead
(5) a. * Hur långsamt att läsa går den här artikel-n?
   how slowly to read goes this here paper-CMN.DEF
   ‘How slowly does this paper read?’

b. * Hur lång tid att läsa tar den här artikel-n?
   how long time to read takes this here paper-CMN.DEF
   ‘How long does it take to read this paper?’

c. * Hur mycket att ladda ner kostar den artikel-n?
   how much to download costs that paper-CMN.DEF
   ‘How much does it cost to download that paper?’

d. Hur svår att läsa är den här artikel-n?
   how difficult to read is this here paper-CMN.DEF
   ‘How difficult to read is this paper?’

In addition to syntactic differences, there are also morphological differences between the predicates. While adjectival tough-predicates show morphological agreement with the subject, nominal and verbal ones do not. I will return to this property in Sect. 3.

TCs are different from other, superficially similar adjectival constructions in that they have expletive counterparts. In this respect, they are similar to raising constructions. The subject of the TC thus has the same thematic interpretation as the embedded object in the expletive counterpart. All TC types exemplified above have expletive counterparts, (6a)–(6h) below. Indeed, Hicks (2009), among others, takes the ability to alternate with expletive constructions to be a defining property of TCs.

(6) a. Det är svår-t att läsa den här artikel-n.
   it is difficult-NEUT to read this here paper-CMN.DEF
   ‘It is difficult to read this paper.’

b. Det är en mardröm att läsa den här artikel-n.
   it is a nightmare to read this here paper-CMN.DEF
   ‘It is a nightmare to read this paper.’

means something like ‘difficult’ or ‘a hassle.’ Nominal tough-predicates are therefore quite limited in what type of modification they allow for, (iii), and hence in what type of related question can be formed.

(iii) [Den här artikel-n]_1 är en sann/ verklig/ absolut/ *hemska/ *otäcka/ *ofarliga/ this here paper-CMN.DEF is a true/ real/ absolute/ scary/ frightening/ non-dangerous/ *fartfylld mardröm att läsa ___1.

   fast nightmare to read
   ‘This paper is a true/real/absolute/*scary/*frightening/*non-dangerous/*fast nightmare to read.’

8 Another view is expressed by, among others, Hornstein (2001) and Kim (1995). They argue that the adjective in TCs must be able to assign a theta-role to the subject, since the infinitival clause can sometimes be omitted, in which case the embedded verb cannot be the theta-role assigner. The infinitival clause has the status of adjunct, according to these authors. Comrie and Matthews (1990), in contrast, argue that omission of the infinitival clause is only possible when its meaning can be retrieved from the context. The omission is thus more like object-omission than adjunct-omission and this indicates that the theta-role of the subject is assigned by the embedded predicate. For discussion, see Hicks (2003, 2009).
c. Det går långsamt att läsa den här artikel-n.  
   it goes slowly to read this here paper-CMN.DEF  
   ‘This paper is slow to read.’

d. Det går att läsa den här artikel-n.  
   it goes to read this here paper-CMN.DEF  
   ‘It is possible to read this paper.’

e. Det fungerar att läsa den här artikel-n.  
   it functions to read this here paper-CMN.DEF  
   ‘It is possible to read this paper.’

f. Det tar en timme att läsa den här artikel-n.  
   it takes an hour to read this here paper-CMN.DEF  
   ‘It takes an hour to read this paper.’

g. Det kostar en förmögenhet att ladda ner den artikel-n.  
   it costs a fortune to download that paper-CMN.DEF  
   ‘It costs a fortune to download that paper.’

h. Det kostar på att läsa den här artikel-n.  
   it costs PART to read this here paper-CMN.DEF  
   ‘It is demanding to read this paper.’

The sentences in (6) are clear examples of expletive constructions. In the next section, we will see that expletive constructions can look identical to TCs under certain conditions. Such constructions need to be distinguished from TCs as they have other properties.

2.2 TCs and expletive-drop constructions

In Swedish, expletive subjects can be left out under certain conditions (for details, see Falk 1993; Engdahl 2010, 2012; Platzack 2012b, 2013). The nominal and verbal TCs in (4b)–(4h), above, are a case in point: they are structurally ambiguous, which can be shown by adding tag questions to them. The subject in the tag is a pronoun corresponding in number and gender to the subject of the main clause. In one structural variant, the first constituent (den här artikeln) is the syntactic subject, (7a), while in the other variant, there is an expletive subject that is not pronounced in the main clause but is pronounced in the tag, (7b). The sentences in (7a)–(7b) illustrate this for the verbal go-TC, but the pattern holds for all of the TC types in (4b)–(4h).

9I take the unpronounced expletive subject (indicated as det) to appear in the position after the verb, precisely as regular subjects in the presence of a non-subject clause-initial element:

(i) [Den här artikel-n] det går långsamt att läsa visst gör det?  
   this here paper-CMN.DEF goes slowly to read surely does it.NEUT  
   ‘This paper reads slowly, doesn’t it?’
In (7b), the first constituent (den här artikeln) is not a subject but a fronted object and the sentence is therefore not a TC.

Notably, only sentences with a verbal, nominal or neuter-marked adjectival predicate are ambiguous as in (7a)–(7b). With an adjectival predicate marked for common gender or plural, there is only one possible structure, (8), because common gender and plural-marked predicates are incompatible with expletive subjects (whether pronounced or dropped), (9).

(8) [Den här artikel-n]₁ går långsamt att läsa ___₁, visst gör det? [aTC]
       it.CMN/ it.NEUT
   ‘This paper reads slowly, doesn’t it?’

(9) Det är svår-t/ *svår/ *svår-a att läsa den här artikel-n. paper-CMN.DEF
     ‘It is difficult to read this paper.’

Since structures with a dropped expletive subject are not TCs, it is important to make sure the sentences discussed below do not have a dropped expletive. The ambiguity in sentences like (4b)–(4h) arises because subjects in Swedish can appear either before or after the verb. If an adverbial is placed in the clause-initial position, the ambiguity disappears. In that case, the overt DP following the verb must be the subject, leaving no room for a dropped expletive:

(10) Förhoppningsvis går (*det) [den här artikel-n]₁ (*det) lätt att hopefully goes (it) this here paper-CMN.DEF (it) easily to läsa ___₁. [vTC]
     read
   ‘This paper is hopefully easy to read.’

With a clause-initial adverbial, the sentence in (10) is a clear case of a TC. This is also the case if the sentence is turned into a polar question. As in (10), the overt DP following the verb is unambiguously the subject:
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(11) Går (*det) [den här artikel-n] lätt att läsa ____? [vTC]
      goes (*it) this here paper-CMN.DEF (it) easily to read
      ‘Is this paper easy to read?’

In the rest of the paper, I will include clause-initial adverbials or use the polar question form in the otherwise ambiguous cases to make sure that the sentences in question are TCs rather than expletive constructions.10

In the next two subsections, I turn to binding and scope reconstruction properties of TCs in Swedish. Such properties can be indicative of whether the constructions involve movement of the subject or not.11

2.3 Reflexive binding

As expected, reflexives in subject position are ill-formed in Swedish when the subject is non-derived.

(12) a. * Bilder-na på sig själv hängde mitt framför Kalle1.
      pictures-DEF of REFL self hung right in front of Kalle
      ‘The pictures of himself hung right in front of Kalle.’

10As pointed out by a reviewer, the sentences can also be disambiguated with personal pronouns. These pronouns have distinct forms for subject and object case (with the exception of det ‘it’ (neuter), den ‘it’ (common) and dom ‘they’). Pronouns in the subject form are incompatible with a (dropped) expletive subject. Personal pronouns are however a less useful test for my purposes as the ones having distinct subject and object forms are those referring to animate entities.

      (i) a. [Du] är (*det) verkligen svår att klippa ____ 1.
          you.NOM are it really difficult.CMN to cut
          ‘Your hair is really difficult to cut.’

      b. [Dig] är (det) verkligen svår-t att klippa ____ 1.
          you.ACC is it really difficult-NEUT to cut
          ‘Your hair is really difficult to cut.’

11For TCs in English, Experiencer PPs are also used to argue for as well as against movement of the subject (for different views, see e.g. Hartman 2011a,b; Keine and Poole 2016). Such phrases are however not a useful diagnostic in Swedish. Unlike in English, Swedish för-PPs are clearly PPs and not infinitival for-subjects, (ia). Furthermore, för-PPs are well-formed in both TCs and their expletive counterparts, (ib)–(ic).

      (i) a. * För Pelle att komma för sent var en dålig start på dag-en.
          for Pelle to come too late was a bad start of day-CMN.DEF
          ‘For Pelle to be late was a bad start of the day.’

      b. [Kaka-n] var svår för Per att baka ____ 1.
          cake-CMN.DEF was difficult.CMN for Per to make
          ‘The cake was difficult for Per to make.’

      c. Det var svår-t för Per att baka kaka-n.
          it was difficult-NEUT for Per to make cake-CMN.DEF
          ‘It was easy for Per to make the cake.’

Because PPs (at least of this kind) are not interveners for movement in Swedish, they are not a useful diagnostic for either movement or base-generation in TCs.
b. * Bilder-na på sin-a₁ vänner hängde mitt framför Kalle₁.
pictures-DEF of REFL-PL friends hung right in front of Kalle

‘The pictures of his friends hung right in front of Kalle.’

In constructions with derived subjects, as in (13) below, reflexives in the subject are accepted by some speakers, although others find these also ill-formed.¹²

(13) % [bilder-na på sig själv₁₂] har ännu inte blivit upphängda ___２
pictures-DEF of REFL self have yet not become hung

av Kalle.
by Kalle

‘The pictures of himself have not yet been hung by Kalle.’

The sentences in (12)–(13) illustrate that, for those speakers that accept reflexives inside the subject, the reflexive is well-formed only if the subject has been moved from a position lower than the binding element. To other speakers, reflexives in subjects are ill-formed also in such cases, as mentioned above. This is also the case with the TC data below; Some speakers find the sentences marked or ill-formed, while others find them fully acceptable. I use % to indicate this.¹³ With this in mind, reflexives should be possible to use as a one-way diagnostic for movement in TCs. If a reflexive is well-formed inside the subject, the subject must have moved from a position lower than the antecedent, but if it is not well-formed, no clear conclusions can be drawn. In this section, I present reflexive data that indicate that the subject has indeed moved, and, moreover that it has moved all the way from inside the embedded clause. The data are of three types: picture-noun contexts, contexts where the reflexive is not embedded under another noun, and ditransitives (see discussion in Poole et al. 2016).

The first type of data I look at is picture-noun contexts. As illustrated in the examples in (14), TCs in Swedish allow for a reflexive inside the subject, bound by an argument lower down in the structure. The examples in (14) have a reflexive pronoun and the ones in (15) have a reflexive possessive.

(14) a. % På utställning-en igår var [bild-en på sig själv₁₂] svår för varje fotograf₁ att sälja ___２.

at exhibition-DEF yesterday was picture-DEF of REFL self difficult.CMN for every photographer to sell

‘The picture of him/herself was difficult for every photographer to sell yesterday at the exhibition.’

b. % På utställning-en igår gick [bild-en på sig själv₁₂] lätt för varje fotograf₁ att sälja ___２.

at exhibition-DEF yesterday went picture-DEF of REFL self easily for every photographer to sell

¹²I assume that the Agent av-PP (‘by’-PP) in the passive is generated above the participle, hence in a position where it can bind the object before it moves into the subject position.

¹³The reflexive data in this section as well as the scope reconstruction data in the next section have been checked with 4–8 native speakers each. Some of the speakers are trained linguists, but the variation is not linked to that. When a sentence is marked %, some speakers find it fully acceptable, while others find it questionable.
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‘The picture of him/herself was easy for every photographer to sell yesterday at the exhibition.’

(15) a. % På utställning-en igår var [bild-en på sin-a₁ vänner]₂ at exhibition-DEF yesterday was picture-DEF of REFL-PL friends svår för varje fotograf₁ att sälja ____₂. [aTC]
difficult.CMN for every photographer to sell ‘The picture of his/her friends was difficult for every photographer to sell yesterday at the exhibition.’

b. % På utställning-en igår gick [bild-en på sin-a₁ vänner]₂ at exhibition-DEF yesterday went picture-DEF of REFL-PL friends lätt för varje fotograf₁ att sälja ____₂. [vTC]
easily for every photographer to sell ‘The picture of his/her friends was easy for every photographer to sell yesterday at the exhibition.’

For those speakers who accept sentences like (14)–(15), the sentences become ill-formed when the för-PP containing the antecedent is removed, even in the presence of a salient potential discourse antecedent:¹⁴,¹⁵

(16) a. * Stackars fotograf-er-na. På utställning-en igår var poor photographer-PL-DEF at exhibition-DEF yesterday were [bild-er-na på sig själv-a₁ svår-a att sälja ____₁]. [aTC]
picture-PL-DEF of REFL self-PL difficult-PL to sell ‘Poor photographers. The pictures of themselves were difficult to sell yesterday at the exhibition.’

b. * Stackars fotograf-er-na. På utställning-en igår gick poor photographer-PL-DEF at exhibition-DEF yesterday went [bild-er-na på sig själva]₁ trägt att sälja ____₁. [vTC]
picture-PL-DEF of REFL self-PL slowly to sell ‘Poor photographers. The pictures of themselves were slow to sell yesterday at the exhibition.’

(17) a. * Stackars fotograf-er-na. På utställning-en igår var poor photographer-PL-DEF at exhibition-DEF yesterday were [bild-er-na på sin-a vänner]₁ svår-a att sälja ____₁. [aTC]
picture-PL-DEF of REFL-PL friends difficult-PL to sell

¹⁴The intended readings in (16) are episodic. In generic contexts, reflexives can be acceptable even without an overt binder (see Teleman et al. 1999:335). In such cases, the reflexive is presumably bound by the generic operator.

¹⁵A reviewer points out that some speakers find the expletive constructions corresponding to the type of sentences in (16) and (19) well-formed, cf (i). To me, however, sentences like (i) take on a generic reading in the absence of a för-phrase. On such readings, see also Teleman et al. (1999:332, fn. 1).

(i) Det var lätt att fotografera sin-a barn.
it was easy to photograph REFL-PL children
‘It was easy to photograph one’s children.’
‘Poor photographers. The pictures of their friends were difficult to sell yesterday at the exhibition.’

While *varje fotograf* (‘every photographer’) co-varies with the reflexive in (14)–(15), the same is not the case for *fotograferna* (‘the photographers’) in (16)–(17). The difference in well-formedness between these sentences indicates that the reflexives need to be bound and that the Experiencer *för*-PP can act as a binder.

The sentences in (16)–(17) show that picture-noun reflexives in Swedish need to be syntactically bound (in episodic contexts, see fn. 14). In English, on the other hand, picture-noun contexts have been shown not to require syntactic binding and are consequently not considered to be a reliable diagnostic for syntactic binding (e.g. Reinhart and Reuland 1991; Pollard and Sag 1992; Reinhart and Reuland 1993; Heycock 1995; Bhatt 2002). While it is quite clear, thus, that Swedish is different

16 Unbound reflexives are not much discussed in the literature on Swedish, presumably because they are not considered to be possible (see Engdahl 1986:107 and Heinat 2006:130–131, where the issue is briefly mentioned). In this regard, Swedish is like its closely related language Norwegian (see Lødrup 2007), but unlike English (the example in (ia) is from Pollard and Sag 1992:274 and the Norwegian counterpart in (ib) is from Lødrup 2007:186):

(i) a. John was going to get even with Mary. That picture of himself in the paper would really annoy her, as would the other stunts he had planned.
   b. *John skulle bli skuls med Mary. Bildet av seg selv i avis-en ville virkelig ergre henne. ‘John was going to get even with Mary. The picture of himself in the paper would really annoy her.’
   c. *Johan skulle ge igen på Mary. Bild-en på sig själv i tidning-en skulle verkligen förarga henne. ‘John was going to take revenge on Mary. The picture of himself in the paper would really anger her.’

Reflexives in picture-nouns in Swedish also differ from their English counterparts in not allowing split antecedents. The possibility of having split antecedents has also been taken to indicate that the reflexive is not syntactically bound (on English, see Bouchard 1984, discussed in Charnavel and Sportiche 2016:36) (the example in (iiia) is from Charnavel and Sportiche 2016:36):

(ii) a. John showed Bill pictures of themselves.
   b. *Johan visade Per bild-er på sig själv-a. Johan showed Per picture-PL of REF-PL.

17 As discussed in Charnavel and Sportiche (2016:39), exempt (syntactically unbound) anaphors must have antecedents whose referents are live persons. Thus if the referent of the antecedent is inanimate (and
from English with regard to picture-nouns, I nevertheless give examples in (18) below where the reflexive is not embedded under such nouns. Notably, even to speakers who find (18) degraded, there is a clear contrast between these sentences and the corresponding examples without the binder in the för-phrase.18

(18) a. % På fest-en igår var [sin-a₁ barn]₂ svår-a för at party-DEF yesterday were REFL-PL children difficult-PL for många föräldrar₁ att fotografera ____. [aTC] many parents to photograph
   ‘Their children were difficult for many parents to photograph yesterday at the party.’

   b. % På fest-en igår gick [sin-a₁ barn]₂ lätt för många at party-DEF yesterday went REFL-PL children easily for many föräldrar₁ att fotografera ____. [vTC] parents to photograph
   ‘Their children were easy for many parents to photograph yesterday at the party.’

The examples in (19) show that the sentences are not well-formed in the absence of a syntactic binder:

(19) a. * Stackars grannar-na. På fest-en igår var [sin-a poor neighbours-DEF at party-DEF yesterday were REFL-PL barn]₁ svår-a att fotografera ____. [aTC] children difficult-PL to photograph
   ‘Poor neighbours. Their children were difficult to photograph yesterday at the party.’

is not used as a proxy for people), the reflexive anaphor is not exempt. TCs like those in (14)–(15) can be constructed with inanimate antecedent för-phrases, although they then require a special context. Imagine, for instance, a context in which there is something faulty with a camera so that it takes pictures of itself but cannot be used to take pictures of other things. In that case, we can utter:

(i) % Märkligt nog gick [bild-er på sig₁ själv]₂ lätt för kamera-n₁ att ta ____. strangely enough went picture-PL of REFL self easily for camera-DEF to take
   ‘Strangely enough, pictures of itself were easy for the camera to take.’

18 Platzack (2012a:201, ex. (10)) gives example (i) as an illustration that the TC subject cannot include reflexives:

(i) * Sin₁ bror var lätt för honom₁ att träffa i London. REFL brother was easy for him to meet in London
   ‘His brother was easy for him to meet in London.’

While I agree that the sentence in (i) is not completely natural, I would not mark it as unacceptable. In the main text above, I give examples with reflexives in the subject of the TC that are judged as well-formed.
b. * Stackars grannarna. På fest-en igår gick [sin-a poor neighbours-DEF at party-DEF yesterday went REFL-PL barn]� trögt att fotografera ___1. [vTC]

children slowly to photograph

‘Poor neighbours. Their children were difficult to photograph yesterday at the party.’

The examples in (14)–(19) show that reflexives are well-formed (to some speakers) inside the subject of a TC when there is an antecedent that can bind it (the för-PP). As pointed out by a reviewer though, this data is compatible with movement of the subject from a position lower than the antecedent för-PP but higher than the embedded clause. The data thus does not unambiguously show that the subjects have moved from inside the embedded clause. Poole et al. (2016) discuss this issue for English, using the ditransitive paradigm in (20) (their ex. (5)). As shown in (20c), English TCs do not allow for a pronoun inside a subject to be bound by something inside the embedded clause:

(20) a. **Baseline with binding:**

   It was hard for John to tell every farmer� [the bad news about her goat].

b. **Baseline with no binding:**

   [The bad news about the well ]� was hard for John to tell every farmer ___1.

c. * **Variable binding not possible:**

   [The bad news about her goat ]� was hard for John to tell every farmer1 ___2.

For Swedish, a different pattern emerges: variable binding into the embedded clause is possible. In (21)–(22), the direct object (sin (rätmätiga) løn ‘his/her (rightful) salary’) is bound by the indirect object (varje anställd ‘every employee’) both in the expletive sentences, (21a), (22a), and the TCs, (21c), (22c). (The sentences in (21b) and (22b) are control sentences with no binding, as in (20b) above.)

(21) a. Nog var det svår-t (för oss) att ge varje anställd� [sin1 surely was it difficult-NEUT for us to give every employee REFL (rätmätiga) løn/ bonus-en] igår eftermiddag.

   rightfull salary/bonus-CMN.DEF yesterday afternoon

   ‘It was surely difficult (for us) to give every employee his/her rightful salary/the bonus yesterday afternoon.’

b. Nog var [bonus-en]� svår (för oss) att ge varje surely was bonus-CMN.DEF difficult.CMN for us to give every anställd ___1 igår eftermiddag. [aTC]

   employee yesterday afternoon

   ‘The bonus was surely difficult (for us) to give every employee yesterday afternoon.’
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c. % Nog var [sin1 (rättmätiga) lön]2 svår (för oss) att ge surely was REFL rightful salary difficult.CMN for us to give varje anställd1 __2 igår eftermiddag. every employee yesterday afternoon

‘His/Her rightful salary was surely difficult (for us) to give every employee yesterday afternoon.’

(22) a. Nog gick det lätt (för oss) att ge varje anställd1 [sin1 surely went it easily for us to give every employee REFL (rättmätiga) lön/ bonus-en] igår eftermiddag. rightful salary/ bonus-CMN.DEF yesterday afternoon

‘It was surely easy (for us) to give every employee his/her rightful salary/ the bonus yesterday afternoon.’

b. Nog gick [bonus-en]1 lätt (för oss) att ge varje anställd surely went bonus-CMN.DEF easily for us to give every employee __1 igår eftermiddag. yesterday afternoon

‘The bonus was surely easy (for us) to give every employee yesterday afternoon.’

c. % Nog gick [sin1 (rättmätiga) lön]2 lätt (för oss) att ge varje surely went REFL rightful salary easily for us to give every anställd1 ____2 igår eftermiddag. employee yesterday afternoon

‘His/Her rightful salary was surely easy (for us) to give every employee yesterday afternoon.’

In (21)–(22), the reflexive appears in the direct object which is structurally lower than the indirect object binding it. If the reflexive appears in the indirect object instead, the sentence is no longer well-formed. The sentences in (23) below are expletive constructions illustrating this: (23a) is well-formed since the reflexive (sin baby ‘her baby’) appears in the direct object below the antecedent (varje mamma ‘every mum’), while (23b) is ill-formed, the reflexive (sin mamma ‘his/her mum’) appearing above its intended antecedent (varje baby ‘every baby’).

(23) a. Det var svår-t för mig att räcka varje mamma1 sin1 baby it was difficult-NEUT for me to hand every mum REFL baby på föräldraträff-en igår. on parents’ meeting-DEF yesterday

‘It was difficult for me to hand every mum her baby yesterday in the parents’ meeting.’

b. * Det var svår-t för mig att räcka sin1 mamma varje baby1 it was difficult-NEUT for me to hand REFL mum every baby på föräldraträff-en igår. on parents’ meeting-DEF yesterday
The TC corresponding to the expletive construction in (23a) is well-formed, (24a). Forming a TC corresponding to the ill-formed sentence in (23b) is not possible, (24b). More specifically, the subject (sin mamma ‘his/her mum’) is interpreted as the thing given (thus corresponding to the direct object before movement) rather than the recipient (indirect object), as can be seen in the translation. Given the meaning of räcka (‘hand’), this is a very implausible reading.

(24) a. % Nog var sin₁ baby svår för mig att räcka varje mamma₁ surely was REFL baby difficult.CMN for me to hand every mum på föräldraträff-en igår. at parents’ meeting-DEF yesterday ‘Surely her baby was difficult for me to hand to every mum yesterday at the parents’ meeting.’

b. # Nog var sin₁ mamma svår för mig räcka varje baby₁ surely was REFL mum difficult.CMN for me to hand every baby på föräldraträff-en igår. at parents’ meeting-DEF yesterday ‘Surely his/her mum was difficult for me to hand to every baby yesterday at the parents’ meeting.’

The ditransitive data shows that the reflexive cannot be merged in a position above its intended binder, i.e. it cannot be interpreted logophorically. Furthermore, since the reflexives in the subjects in (21c), (22c) and (24a) (sin (rättmätiga) lön ‘his/her (rightful) salary’ and sin baby ‘her baby,’ respectively) are bound by the indirect objects (varje anställd ‘every employee’ and varje mamma ‘every mum,’ respectively) in the embedded clauses, I conclude that the subject has moved from inside the embedded clause in these cases. The data looked at in this section show that for those speakers who accept reflexives in the subject position in TCs, the reflexives must have an antecedent syntactically binding it at some stage of the derivation.

2.4 Scope properties

When it comes to scope reconstruction properties, TCs in Swedish behave differently depending on what type of predicate they have. TCs with verbal and nominal predicates allow for the subject to reconstruct below the predicate, (25a)–(25d), and so do adjectival TCs whose predicate has neuter agreement marking, (26a)–(26b). Adjectival TCs with common gender or plural marking on the predicate, in contrast, do not allow for the subject to reconstruct, (27a)–(27b).¹⁹

¹⁹The examples in (25)–(27) below are episodic in the past tense, to avoid so-called illusive scope effects that can arise under generic tense (see Fox and Sauerland 1995).
(25) **Verbal and nominal TCs: Reconstruction possible**

a. Gick [få personer]$_1$ lätt för Johan att prata med ___$_1$ igår?
goes few people easily for Johan to talk to yesterday
‘Were few people such that each one of them was easy for Johan to talk to yesterday?’ or
‘Was it easy for Johan to talk to a small group of people yesterday?’

few > go easily, go easily > few

b. Tog [få artiklar]$_1$ en timme för Johan att läsa ___$_1$ igår?
took few papers an hour for Johan to read yesterday
‘Were few papers such that each one of them took an hour for Johan to read yesterday?’ or
‘Did it take Johan an hour to read a small number of articles yesterday?’

few > take an hour, take an hour > few

c. Kostade [få låtar]$_1$ 100 kr (för Johan) att ladda ner ___$_1$ igår?
cost few songs 100 kr for Johan to download yesterday
‘Were few songs such that each one of them cost 100 kr for Johan to download yesterday?’ or
‘Did it cost Johan 100 kr to download a small number of songs yesterday?’

few > cost 100 kr, cost 100 kr > few

d. Var [få personer]$_1$ en mardröm för Johan att prata med ___$_1$
were few people a nightmare for Johan to talk to yesterday
‘Were few people such that each one of them was a nightmare for Johan to talk to yesterday?’ or
‘Was it a nightmare for Johan to talk to a small group of people yesterday?’

few > a nightmare, a nightmare > few

(26) **Adjectival TCs [+neuter]: Reconstruction possible**

a. Var [ett enda plagg]$_1$ svår-t för Johan att köpa
was one single piece of clothing difficult-NEUT for Johan to buy
one
‘Was one single piece of clothing such that it was difficult for Johan to buy?’ or
‘Was it difficult for Johan to buy just one piece of clothing?’

one > difficult; difficult > one
b. Var [ett enda fönster]₁ svår-t för Johan att tvätta ____₁?
   was one single window difficult-NEUT for Johan to wash
‘Was one single window such that it was difficult for Johan to wash?’
or
‘Was it difficult for Johan to wash just one window?’
one > difficult, difficult > one

(27) Adjectival TCs [+common/+plural]: Reconstruction not possible

a. [Få personer]₁ var svår-a för Johan att prata med ____₁.
   few people were difficult-PL for Johan to talk to
‘Few people were difficult for Johan to talk to.’
   few > difficult, *difficult > few
b. [En bok]₁ var svår för Anna att ge bort ____₁.
   a book was difficult.CMN for Anna to give away
‘One (particular) book was difficult for Anna to give away.’
one > difficult, *difficult > one

Possible readings for a few of the examples above are as follows: In (25a), an answer to the question on its surface scope reading (i.e. ‘Were few people such that each one of them was easy for Johan to talk to?’) could be ‘Yes, Anna was easy for him to talk to, and Pete was easy for him to talk to, and Kate too, but everyone else was difficult for him to talk to.’ An answer to the narrow scope question (i.e. ‘Was it easy for Johan to talk to a small group of people?’) could be ‘Yes, any group consisting of fewer than five people was easy for him to talk to, but any group larger than that was a problem.’ Similarly in (26a), a possible answer to the wide scope reading question (‘Was one single piece of clothing such that it was difficult for Johan to buy?’) is ‘Yes, there was a specific jumper that he needed but which was difficult for him to buy, but no other pieces of clothing were difficult for him to buy.’ On the narrow scope reading (‘Was it difficult for Johan to buy just one piece of clothing?’) the answer could instead be ‘Yes, it was very difficult for him to restrict himself to buying just one piece of clothing as he really likes clothes shopping.’ Unlike the sentences in (25) and (26), the sentences in (27) only have the surface scope reading.

Before discussing why reconstruction is blocked in the common gender and plural cases, I will add a brief note on non-agreeing cases. For adjectival TC to block the reconstructed readings, as in (27) above, it is crucial that the predicate is marked in accordance with the common gender or plural subject. If it does not agree morphologically with the subject but is instead marked as neuter, reconstruction is possible (see also Malmgren 1984:103–104). Such non-agreeing constructions, illustrated in (28)–(29) below, are examples of expletive-drop constructions, as discussed in Sect. 2.2 above. In these sentences, an expletive can be inserted between the matrix verb and the adjective and they are therefore not TCs. With neuter agreement, the narrow scope reading is preferred over the surface reading. Since the surface scope reading does not seem to be completely ruled out, however, I have included it too in the translation but
marked it as ?? in the last line. The examples in (29) are from Malmgren 1984:104–105.  

(28) Expletive-drop constructions

a. [Få personer]₁ är svår-t för Johan att prata med ___₁.
   few people are difficult-NEUT for Johan to talk to
   ‘It is difficult for Johan to talk to few people.’ or
   ‘Few people are such that it is difficult for Johan to talk to them.’
   ?? few > difficult, difficult > few

b. [En bok]₁ är svår-t för Anna att ge bort ___₁.
   a book is difficult-NEUT for Anna to give away
   ‘It is difficult for Anna to give away a book.’ or
   ‘One book is such that it is difficult for Anna to give it away.’
   ?? one > difficult, difficult > one

(29) a. [Båda hot-en]₁ är svår-a att parera ___₁.
   both threats-DEF are difficult-PL to parry
   ‘Both threats are difficult to parry.’
   both > difficult; *difficult > both

20 While the wide scope reading is marginally possible in the expletive-drop constructions in (28)–(29), it is ruled out in canonical expletive constructions:

(i)  a. Det är svår-t för Johan att prata med få personer.
   it is difficult-NEUT for Johan to talk to few people
   ‘It is difficult for Johan to talk to few people.’
   *few > difficult, difficult > few

b. Det är svår-t för Anna att ge bort en bok.
   it is difficult-NEUT for Anna to give away one book
   ‘It is difficult for Anna to give away a book.’
   *one > difficult, difficult > one

c. Det är svår-t att parera båda hot-en.
   it is difficult-NEUT to parry both threats-DEF
   ‘It is difficult to parry both threats.’
   *both > difficult; difficult > both

It seems likely that the different surface orderings of the constituents in expletive constructions with overt and dropped expletives play a role for the availability of the different scope readings. It is beyond the scope of the present paper to account for these differences.

21 Putting the sentences in (28) and (29b) in the yes/no format yields an ill-formed or only marginally acceptable result:

(i) ?? Är få personer svår-t för Johan att prata med?
    are few people difficult-NEUT for Johan to talk to

For speakers who think yes/no questions of sentences like (28) and (29b) marginally acceptable but not completely ill-formed, it might be possible to analyze such sentences simply as non-agreeing TCs, rather than as expletive-drop constructions. In terms of (non)-agreement, these sentences would behave similarly to the so-called “Pancake sentences” (Josefsson 2010, 2014) discussed in Sect. 3 below. The potential existence of non-agreeing TCs has no bearing on the correlation between agreement and scope freezing, discussed in the paper.
b. [Båda hot-en]₁ är svår-t att parera ___₁.
   both threats-DEF are difficult-NEUT to parry
   ‘It is difficult to parry both threats.’ or
   ‘Both threats are such that it is difficult to parry (each one of) them.’

Leaving expletive-drop constructions aside, we have a situation where adjectival TCs (excluding neuter marked ones) differ from non-adjectival ones (verbal and nominal TCs) in their scope reconstruction properties.22 On the assumption that the possibility of a narrow scope reading is dependent on previous movement and that the absence of such a reading therefore suggests absence of movement, the reconstruction data seemingly point in two different directions for the derivation of TCs in Swedish: via base-generation of the subject for the adjectival group (excluding neuter marked ones) and via movement of the subject for the non-adjectival group (verbal and nominal TCs). In the next section, however, I propose that lack of reconstruction can be independently explained in Swedish and that the lack of reconstruction therefore does not indicate lack of movement.

3 Predicative agreement and reconstruction in Swedish

In the following, I propose an analysis that ties the lack of reconstruction in adjectival TCs to the particular subject–predicate agreement taking place in these contexts. I begin by giving a short overview of predicative agreement in Swedish, before I turn to the analysis of the different agreement contexts in Sect. 3.1, and discuss why some of these contexts lead to scope freezing in Sect. 3.2. After that, I show that the analysis also extends to passives and raising constructions, in Sects. 3.3–3.4.

The obvious difference between adjectival and non-adjectival TCs is that in adjectival TCs, the predicate agrees morphologically with the subject while it does not in non-adjectival ones. In Swedish, adjectives in predicative position are marked for common or neuter gender in the singular, and for plural. The sentences in (30) exemplify all three markings. The sentences in (31) show that verbal and nominal predicates have the same morphological form irrespective of the gender and number of the subject.

(30) Adjectival marking
   a. Visst är [artikel-n]₁ svår att läsa ____₁. [aTC]
      surely is paper-CMN.DEF difficult.CMN to read
      ‘The paper is surely difficult to read.’

22 Adjectival TCs in Swedish are also noteworthy cross-linguistically since their binding and scope properties do not go hand in hand. As extensively discussed in Romero (1998) and Fox (1999), if the embedded clause is available for scope reconstruction purposes of some fronted element, it should also be available for binding purposes of this element. For Swedish adjectival TCs with common gender or plural marking, however, a binding relation into the embedded clause is possible although the scope reconstruction into this clause is not possible.
b. Visst är [utkast-et] svår-t att läsa _____1. [aTC] 
   surely is draft-NEUT.DEF difficult-NEUT to read
   ‘The draft is surely difficult to read.’

c. Visst är [artiklar-na] svår-a att läsa _____1. [aTC] 
   surely are papers-DEF difficult-PL to read
   ‘The papers are surely difficult to read.’

(31) **Nominal and Verbal cases: No marking**

a. Visst är [artikel-n/ utkast-et/ artiklar-na] en mardröm att läsa _____1. [nTC] 
   nightmare to read
   ‘The paper/draft is/ the papers are surely a nightmare to read.’

b. Visst går [artikel-n/ utkast-et/ artiklar-na] lätt att läsa _____1. [vTC] 
   easily to read
   ‘The paper/draft is/ the papers are easy to read.’

The morphological form of the predicative adjective reflects properties of the subject
that it agrees with. In regular cases, a common gender subject in the singular (e.g. artikeln ‘the paper’ in (30a)) will result in a common gender marked adjective, a
neuter gender singular subject (e.g. utkastet ‘the draft’ in (30b)) will result in a neuter marked adjective and a plural subject (e.g. artiklarna ‘the papers’ in (30c) ) in a plural marked adjective.

In some particular cases, the agreement pattern is less straight-forward (see Tele-
man et al. 1999:278–279, 288–289). For instance, subjects that contain co-ordinated clauses, (32a), or eventive nominals, (32b), do not result in plural agreement, but
in neuter marking. These cases contrast with conjoined DPs of other kinds, (32c),
which behave like plural nouns in co-occurring with plural agreement marking on
the adjective (the examples in (32a) and (32c) are from Josefsson 2006:1347):

(32) a. Att Bo säljer hus-et och att Calle flyttar till Frankrike är tråkig-t/ *tråkig-a. 
   sad-NEUT/ sad-PL
   ‘It is sad that Bo will sell his house and that Calle will move to France.’

b. Tvättande-t och strykande-t är washing-NEUT.DEF and ironing-NEUT.DEF is 
   tråkig-t/*tråkig-a. 
   boring-NEUT/boring-PL
   ‘The washing and the ironing are boring activities.’

c. Bo och Carl är tråkig-a/ *tråkig-t. 
   Bo and Carl are boring-PL/ boring-NEUT
   ‘Bo and Carl are boring.’
Although the subjects in (32a)–(32b) refer to more than one event or state of affairs, the predicative adjectives are not marked for plural.

Another unexpected pattern is found with bare nominals, which typically refer to mass entities or substances, as discussed by Josefsson (2006). The nouns senap (‘mustard’), grädde (‘cream’) and mjölk (‘milk’) are common gender nouns, (33a). When appearing in bare noun contexts, however, they give rise to neuter marking on the predicative adjective, whether they appear single or conjoined. Sentences of this type are similar to sentences like (34), which are referred to as “Pancake sentences” by Josefsson (2010, 2014). These have bare plural subjects rather than bare singular ones. The examples in (33b)–(33c) are from Josefsson (2006:1347–1348), and (34) from Josefsson (2014:62).

(33) a. Senap-en är stark, grädd-en är god, mustard-CMN.DEF is strong.CMN cream-CMN.DEF is nice.CMN, mjölk-en är kall. milk-CMN.DEF is cold.CMN

‘The mustard is strong, the cream is nice, the milk is cold.’

b. Senap är gul-t. mustard is yellow-NEUT

‘Mustard is yellow.’

c. Men grädde och mjölk är vit-t. but cream and milk are white-NEUT

‘But cream and milk are white.’

(34) Pannkakor är nyttig-t. pancake.PL are healthy-NEUT

‘Eating pancakes is healthy.’

Sentences like (32)–(34) thus all exhibit an apparent mismatch between the subject and predicative adjective in number or gender.

To sum up, common gender marking on the predicative adjective is restricted to contexts with non-bare common gender singular subjects and plural marking is restricted to contexts with subjects in the plural that are neither clauses nor eventive nominals. Neuter marking, on the other hand, is found in contexts with neuter gender singular subjects as well as in contexts with bare subjects of either gender, eventive nominals and clauses appearing on their own or conjoined.

3.1 Gender and number agreement

Descriptively, two sets of features are relevant for subject-predicate agreement in Swedish: gender and number. The subject-predicate agreement patterns observed in the section above can thus be represented by features in the following manner for regular nouns:

[Diagram or representation of features for gender and number agreement]
Agreement and reconstruction correlate in Swedish

(35) **Predicative adjective agreement: Regular nouns**  
   a. [Number: +singular, Gender: +common] → common marking  
   b. [Number: +singular, Gender: +neuter] → neuter marking  
   c. [Number: +plural] → plural marking

While the feature set-up in (35) captures the agreement patterns for the regular cases, the specification for neuter needs to be revised or complemented to account for the less straightforward cases discussed above. As we saw, clauses and eventive nominals do not result in plural agreement when conjoined. Example (36) below shows that they also resist plural forms. More precisely, if they can be pluralized at all, they lose their event meaning in the plural. The nominal in (36a) can thus have either an ‘event’ reading or a ‘thing’ reading, but when pluralized, (36b), only the ‘thing’ reading survives (examples from Josefsson 2006:1350):

(36)  
   a. hans målning  
      his painting  
      ‘his act of painting’ or ‘his picture’  
   b. hans målningar  
      his paintings  
      ‘his pictures’

Building on Grimshaw (1990), Josefsson argues that the inability of clauses and eventive nominals to pluralize is due to their lack of a number feature (2006:1349). When these appear as subjects, they result in neuter marking on the adjective. Lacking a number feature, the reduced feature set-up for these cases would thus be the following:

(37) **Predicative adjective agreement: Non-regular cases**  
   a. [Gender: +neuter] → neuter marking

On closer inspection, it is clear that the feature set-ups given in (35) and (37) include some redundancies. More precisely, the number specification for the non-plural cases, (35a)–(35b), is not necessary to distinguish between the forms. If number is not present on these, the remaining feature is Gender. In the set-ups given, Gender is either +common or +neuter. This specification can also be simplified so as to include only one of these. I am going to propose that only common gender is present as a feature in the feature grid. That means that neuter marking is the result when there is absence of agreement. The neuter form is a default form in the sense of Preminger (2009). That is, the predicate has features that do not get valued in an agree relation, and therefore get default values.23 The revised set-ups are as follows:

23 Crucially, the default form is not the same as the absence of a form. On Preminger’s (2009) analysis of Basque, the default form arises when agreement fails, while the absence of a form is the result of failed clitic doubling. Josefsson (2006) argues against a default analysis. According to Josefsson, personal pronouns lack gender but nevertheless do not result in neuter marking, which one would expect if neuter was the default form (example (ib) is from Josefsson 2006:her ex. (24a)).
Subject-predicate marking on adjectives

a. \([\text{Gender}: +\text{common}] \rightarrow \text{common marking}\)
b. \([\emptyset] \rightarrow \text{neuter marking}\)
c. \([\text{Number}: +\text{plural}] \rightarrow \text{plural marking}\)

The reduced grids allow us to unify all cases of neuter. This is a welcome result since neuter gender contexts behave uniformly and are indeed different from common gender and plural ones when it comes to scope reconstruction, as discussed in Sect. 2.4 above.

When simplifying the feature grids above, we removed the Number feature from the non-plural cases. Although singular DPs thus lack a Num feature, they are of course able to appear with the articles *en* (‘a/one’ common gender) or *ett* (‘a/one’ neuter gender). On my analysis, *en* and *ett* are indefinite markers, spelling out Definiteness features, rather than Number features. Definiteness is also involved in the difference between (33a) and (33b)–(33c) above. (33b)–(33c) lack a Definiteness projection.

Unlike adjectival predicates, which have \(\phi\)-features valued in the agreement process, verbal predicates lack such features altogether in Swedish. Irrespective of type of subject, these predicates therefore look the same (see e.g. (31b) above).

Verbal predicates: Absence of marking

a. \([\text{Gender}: +\text{common}] \rightarrow \emptyset\)
b. \([\emptyset] \rightarrow \emptyset\)
c. \([\text{Number}: +\text{plural}] \rightarrow \emptyset\)

Verbal predicates come with an EPP feature, ensuring that a DP moves into their Specifier position.

(i) a. Hon är snäll/*snäll-t.
   she is kind.CMN/kind-NEUT
   ‘She is kind.’

b. Hon biträde-t var sjuk/*sjuk-t igår.
   she clerk-DEF.NEUT was sick.CMN/*sick-NEUT yesterday
   ‘She/the clerk was sick yesterday.’

On my analysis, the personal pronoun is specified for common gender and therefore gives rise to common gender marking on the predicative adjective. *Hon* in (ib) is the head of the nominal and is the entity agreeing with the predicate. *Biträdet* is in apposition to the head.

24On this analysis, bare plurals, like (34) above, also lack a number feature. By definition, these plurals cannot appear with any quantification sensitive to number. As soon as they do, they are no longer bare, and they will co-occur with plural marking on the adjective.

25This is also true for nominal predicates in TCs, (31a). In other predicational constructions, however, nominal predicates agree with the subject in number:

(i) De är doktor-er/*doktor.
    they are doctor-PL/doctor
    ‘They are doctors.’
3.2 $\phi$-feature agreement and scope freezing

Let’s now return to adjectival predicates. While common gender and plural marking on the adjective is the result of $\phi$-feature checking, neuter marking arises as a default form in the absence of agreement. Recall from Sect. 2.4 that these adjectival contexts also differ in their reconstruction abilities. Reconstruction is blocked in adjectival TCs with common and plural agreement, (27), but it is possible in non-adjectival contexts, (25), as well as in adjectival contexts with neuter agreement, (26):

(27) **Adjectival TCs [+common/+plural]: Reconstruction not possible**

a. [Få personer]$_1$ var svår-a för Johan att prata med ___1.
   few people were difficult-PL for Johan to talk to
   ‘Few people were difficult for Johan to talk to.’
   \textit{few} > \textit{difficult}, *\textit{difficult} > \textit{few}

b. [En bok]$_1$ var svår för Anna att ge bort ___1.
   a book was difficult.CMN for Anna to give away
   ‘One (particular) book was difficult for Anna to give away.’
   \textit{one} > \textit{difficult}, *\textit{difficult} > \textit{one}

(25) **Verbal and nominal TCs: Reconstruction possible**

a. Gick [få personer]$_1$ lätt för Johan att prata med ___1 igår?
   went few people easily for Johan to talk to yesterday
   ‘Were few people such that each one of them was easy for Johan to talk to yesterday?’ or
   ‘Was it easy for Johan to talk to a small group of people yesterday?’
   \textit{few} > \textit{go easily}, \textit{go easily} > \textit{few}

b. Tog [få artiklar]$_1$ en timme för Johan att läsa ___1 igår?
   took few papers an hour for Johan to read yesterday
   ‘Were few papers such that each one of them took an hour for Johan to read yesterday?’ or
   ‘Did it take Johan an hour to read a small number of articles yesterday?’
   \textit{few} > \textit{take an hour}, \textit{take an hour} > \textit{few}

c. Kostade [få låtar]$_1$ 100 kr (för Johan) att ladda ner ___1 igår?
   cost few songs 100 kr for Johan to download yesterday
   ‘Were few songs such that each one of them cost 100 kr for Johan to download yesterday?’ or
   ‘Did it cost Johan 100 kr to download a small number of songs yesterday?’
   \textit{few} > \textit{cost 100 kr}, \textit{cost 100 kr} > \textit{few}

d. Var [få personer]$_1$ en mardröm för Johan att prata med ___1
   were few people a nightmare for Johan to talk to yesterday
‘Were few people such that each one of them was a nightmare for Johan to talk to yesterday?’ or
‘Was it a nightmare for Johan to talk to a small group of people yesterday?’
few > a nightmare, a nightmare > few

(26) Adjectival TCs [+neuter]: Reconstruction possible

| Example | Translation |
|---------|-------------|
| a. Var [ett enda plagg] för Johan att köpa svår-t one single piece of clothing difficult-NEUT for Johan to buy one? |
| ‘Was one single piece of clothing such that it was difficult for Johan to buy?’ or |
| ‘Was it difficult for Johan to buy just one piece of clothing?’ |
| one > difficult, difficult > one |
| b. Var [ett enda fönster] för Johan att tväta svår-t one single window difficult-NEUT for Johan to wash one? |
| ‘Was one single window such that it was difficult for Johan to wash?’ or |
| ‘Was it difficult for Johan to wash just one window?’ |
| one > difficult, difficult > one |

I propose that the crucial difference between the contexts with common gender or plural agreement and all other contexts is the \( \phi \)-feature agreement. When the subject and predicate agree in \( \phi \)-features, the subject is frozen in place for scope purposes. When there is no \( \phi \)-feature agreement between the subject and the predicate, the subject can, in principle, be interpreted either in its derived, surface, position, or in its base position (or any of its intermediate positions). Notably, \( \phi \)-feature agreement with its resulting morphological marking is the exceptional case in Swedish as it is restricted to a subset of the adjectival contexts and does not take place in verbal contexts. Since scope freezing co-occurs with \( \phi \)-feature agreement, scope freezing is also the exceptional case.

There are cross-linguistic differences in what makes reconstruction (un)available in languages. For Swedish I propose that it is connected to \( \phi \)-feature agreement, as we have seen. In English, the situation is different. Verbal predicates are morphologically marked for third person singular, indicating that there is \( \phi \)-feature agreement between the subject and the verbal predicate. Unlike in Swedish, this \( \phi \)-feature agreement does not correlate with scope freezing in general. However, Sauerland and Elbourne (2002) report that in British English, collective nouns can take either plural or singular verb agreement, (40a)–(40b), but that with plural agreement, the subject obligatorily takes wide scope, (40b) (examples from Sauerland and Elbourne 2002:288) (cf. the examples in (29) from Malmgren 1984:103–104):

(40) a. A northern team is likely to be in the final.
(∃ > likely, likely > ∃)

b. A northern team are likely to be in the final.
(∃ > likely, *likely > ∃)
On the wide scope reading, available in both (40a) and (40b), there is a northern team, such that it is likely to be in the final, while on the narrow scope reading, which is only available in (40a), it is likely that some northern team (or other) will be in the final. Sauerland and Elbourne (2002) argue that there are different features present in the two sentences in (40). Collective nouns like team have both an ordinary Number feature, and a Mereology feature, but the Mereology feature is only optionally present on T: it is absent in (40a) but present in (40b). Agreement with the Mereology feature leads to scope freezing, while agreement with the Number feature does not. In this way, Mereology agreement in British English has similar effects as φ-agreement in Swedish. The reason for the scope freezing effect in the British English cases is the following, on Sauerland and Elbourne’s analysis: the Mereology feature must be checked in the overt syntax unlike the Number feature, which can also be checked at LF. When features are checked in the syntax, syntactic movement follows, whereas when features are checked only at LF, movement takes place at PF. Crucially, it is the syntactic positions that determine scope relations. If only a surface scope reading is available, the particular features involved have been checked in the syntax. If both readings are possible, the relevant features have been checked either in the syntax or at LF. To Sauerland and Elbourne, thus, the scope interpretation follows straightforwardly from the syntactic structure. On the other hand, they need to allow for certain features to have the dual possibility of being checked either syntactically or post-syntactically.

To account for the Swedish TC data, I propose an analysis along the lines in Sauerland and Elbourne (2002). Thus, in Swedish, φ-features are obligatorily checked in the syntax and the ensuing movement is syntactic. This is the structure interpreted at LF, accounting for the obligatory surface scope reading. When there is no φ-feature checking and movement is purely EPP-driven, movement takes place at PF. In this case, the subject can either be interpreted in its syntactic position, i.e. get narrow scope, or it can Quantifier Raise to a higher position at LF, and then get wide scope. Since the reconstructed reading is not achieved via lowering or some other undoing operation on this analysis, it is not necessary to stipulate that such an operation is available only when no φ-feature agreement takes place. Instead the scope readings uniformly reflect the syntactic structure, or are achieved via Quantifier Raising at LF if a second, higher scope reading is available.

The motivation for positing two different features relating to number on these nouns is that they can simultaneously behave as singular and plural. They can for instance license singular or plural anaphors, agree with the verb in the singular or the plural, and at the same time be preceded by a singular determiner (examples from Sauerland and Elbourne 2002:289–290):

(i)
   a. The rugby team like their coach and the football team do too.
   b. All the rugby team are carrying its mascots and all the football team are too.
   c. This set are all odd.

It is also possible to analyze the data without PF movement of this kind. The narrow scope reading could, for instance, be achieved via lowering (e.g. May 1977, 1985; Chomsky 1995; Boeckx 2001), or via copy-deletion (e.g. Chomsky 1993; Hornstein 1995; Fox 1999). On a copy-deletion analysis, any copy would in principle be available for the interpretation, unless something made it unavailable. In Swedish, φ-feature agreement could make lower copies unavailable for scope interpretation. The subject would be
To sum up, subject-predicate agreement that involves $\phi$-features results in scope freezing in Swedish. With common gender and plural agreement on the predicate, the subject can only get a surface scope reading, but with neuter gender and with verbal or nominal predicates both readings are possible because these do not involve $\phi$-feature agreement. This analysis makes an empirical prediction: also in non-TC contexts involving movement, reconstruction should be blocked when the predicate is marked for common gender or plural, but should not be blocked otherwise. Examples of such structures are passives and raising constructions.

3.3 Passives

In Swedish, there are two types of passive: morphological and periphrastic. Morphological passives are verbal. They are formed by means of a verbal morpheme that attaches outside any tense morphology. As with other verb forms in Swedish, there is no agreement marking.

(41) **Morphological passives**

a. Bok-en skrev-s på mindre än ett år.  
   book-CMN.DEF wrote-PASS on less than a year  
   ‘The book was written in less than a year.’

b. Böcker-na skrev-s på mindre än ett år.  
   books-DEF wrote-PASS on less than a year  
   ‘The books were written in less than a year.’

c. Dokument-et skrev-s på mindre än ett år.  
   document-NEUT.DEF wrote-PASS on less than a year  
   ‘The document was written in less than a year.’

Periphrastic passives, in contrast, are formally adjectival, in the sense that they make use of an auxiliary (vara ‘be’ or bli ‘become’) and a past participle that agrees morphologically in gender and number with the subject.

(42) **Periphrastic passives**

a. Bok-en är utlåna-d.  
   book-CMN.DEF is out.lend-CMN.PTC  
   ‘The book has been lent.’

b. Manuskript-et är utlåna-t.  
   manuscript-NEUT.DEF is out.lend-NEUT.PTC  
   ‘The manuscript has been lent.’

c. Böcker-na är utlåna-de.  
   books-DEF are out.lend-PL.PTC  
   ‘The books have been lent.’

fixed in relation to the predicate once agreement has taken place. As pointed out by a reviewer, however, an analysis on which $\phi$-feature-driven movement is syntactic while purely EPP-driven movement is not, as proposed in the main text, offers a more explanatory account of the difference in scope possibilities.
Given that periphrastic passives involve subject-predicate agreement, just like predicative adjectives, but morphological ones do not as they are verbal, the two types of passive provide a good testing ground for the correlation between agreement and lack of reconstruction that I have proposed above.

An examination of passives reveals the following general pattern: morphological passives allow for reconstructed readings, (43a)–(43c), while periphrastic ones do not if the participle is marked for common gender or plural, (44a) and (44c). With neuter gender agreement, (44b), the reconstructed reading is possible although the surface scope reading seems to be preferred.

(43) **Morphological passives**

a. Bara en förkortning accepterade-s av förlag-et.
   only one abbreviation accepted-PASS by publisher-NEUT.DEF
   ‘Only one abbreviation was (such that it was) accepted by the publisher.’ or
   ‘The publisher accepted at most one abbreviation.’
   $\exists >$ accepted, accepted $> \exists$

b. Bara ett undantag accepterade-s av förlag-et.
   only one exception accepted-PASS by publisher-NEUT.DEF
   ‘Only one exception was (such that it was) accepted by the publisher.’ or
   ‘The publisher accepted at most one exception.’
   $\exists >$ accepted, accepted $> \exists$

c. Bara två undantag accepterade-s av förlag-et.
   only two exceptions accepted-PASS by publisher-NEUT.DEF
   ‘Only two exceptions were (such that they were) accepted by the publisher.’ or
   ‘The publisher accepted at most two exceptions.’
   $\exists >$ accepted, accepted $> \exists$

(44) **Periphrastic passives**

a. Bara en förkortning blev acceptera-d av förlag-et.
   only one abbreviation became accept-CMN.PTC by publisher-NEUT.DEF
   ‘Only one abbreviation was (such that it was) accepted by the publisher.’
   $\exists >$ accepted, *accepted $> \exists$

b. Bara ett undantag blev acceptera-t av förlag-et.
   only one exception became accept-NEUT.PTC by publisher-NEUT.DEF
   ‘Only one exception was (such that it was) accepted by the publisher.’
   $\exists >$ accepted, ?accepted $> \exists$
The sentence in (43a) is compatible with a situation where there was one particular abbreviation (e.g. MP for ‘Member of Parliament’) that was accepted by the publisher (maybe because all the other ones were not generally used or transparent enough), as well as a situation where the publisher accepted at most one abbreviation, irrespective of what it was (maybe because they had a policy against using abbreviations). In (44a), in contrast, only the first reading is available. The same contrast can be seen between (43c) and (44c). For (43b) and (44b), both readings are possible (although the surface reading is preferred in (44b)).

As pointed out by a reviewer, the reconstruction pattern for passives is complicated by the fact that stress can play a role. Essentially, stress can have the effect of strongly favouring one reading over another. To some but not all speakers, focus can also bring out a reading that is not otherwise available. Under the assumption that Focus structure is operative at LF, its interaction with scope readings comes as no surprise as scope relations too are determined at LF. This interaction deserves a full investigation, but it falls somewhat outside the scope of the present paper. For some relevant data, see the Appendix.

As we have seen, the basic pattern that emerges for passives is similar to what can be observed in TCs. Morphological passives allow for both surface and narrow scope readings of their subjects, while periphrastic passives only allow for the surface scope reading when the participle is marked for common gender or plural. Periphrastic passives with neuter gender agreement are more flexible in often allowing for both readings. Before turning to the derivation of TCs in Swedish in Sect. 4, I will briefly look at raising structures, another context with movement into the subject position.

### 3.4 Raising

Subject-to-subject raising constructions are another instance where we could test the prediction that \( \phi \)-feature agreement leads to scope freezing. However, while minimal pairs of adjectival and verbal passives can be formed relatively freely in Swedish, this is generally not possible in the case of raising structures, as there are only a few adjectival raising predicates, the majority instead being verbal. Bearing this in mind, raising structures still exhibit a similar reconstruction pattern as the one in TCs. That is, quantified subjects can reconstruct below the raising predicate if the predicate is verbal, (45a), but not if the predicate is adjectival, (46a).\(^{28}\)

\[^{28}\]In (45b), both readings are possible although the DP två elever (‘two pupils’) is in a position lower than the raising predicate. I will assume that the reading on which två elever (‘two pupils’) scopes over verkar (‘seems’) is achieved via Quantifier raising of the DP.
The sentence in (45a) has two readings. It can either mean that there are two particular pupils, e.g. Mary and Tom, who seem to be absent. It can also mean that from the total number of pupils, there seem to be two missing, irrespective of who they are. In (46a), in contrast, the only available reading is the one on which two particular pupils, e.g. Mary and Tom, are required to be present. The reading on which there have to be (any) two pupils present is thus unavailable. For the expletive counterparts, the sentence in (45b) allows for both readings, while the sentence in (46b) strongly favours the narrow scope reading.

Thus, although adjectival and verbal raising constructions do not form minimal pairs, the pattern observed for TCs largely carries over to raising constructions.

4 The derivation of TCs in Swedish

In the sections above, I presented evidence from reflexive binding and scope reconstruction indicating movement into the matrix subject position of TCs in Swedish. In the following sections, I propose that TCs in Swedish are derived via movement of the embedded object in two steps: an initial A′-movement step in the embedded clause, followed by A-movement into the matrix subject position. Section 4.1 lays out the evidence for the initial A′-step. In Sect. 4.2 I discuss problems encountered when applying previous A′-movement analyses of English TCs to Swedish ones. In 4.3 I instead suggest a long-distance A′–A movement analysis of TCs in Swedish, placing them in between the English and German types of TC.
4.1 A’-movement in the embedded clause

The fundamental question for TCs is how the subject is linked to the embedded object position where it gets its thematic interpretation. As argued for English (Chomsky 1977), I suggest that the subject of the TC in Swedish is linked to the object position via an A’-step in the embedded clause (see also Engdahl 2012). Evidence for this comes from data like (47), where arguments (Lisa, Johanna, Pelle) appear between the matrix subject and the object position.

\[(47)\] a. [Den artikel-n]₁ är svår att övertala Lisa att be Johanna att hjälpa Pelle att läsa ___₁. [aTC]
   ‘That paper is hard to convince Lisa to ask Johanna to help Pelle to read.’

b. [Den artikel-n]₁ går lätt att övertala Lisa att be Johanna att hjälpa Pelle att läsa ___₁. [vTC]
   ‘That paper is easy to convince Lisa to ask Johanna to help Pelle to read.’

c. [Den artikel-n]₁ kostar på att övertala Lisa att be Johanna att hjälpa Pelle att läsa ___₁. [vTC]
   ‘That paper is demanding to convince Lisa to ask Johanna to help Pelle to read.’

The well-formedness of sentences like (47) indicates that the subject and the object in TCs in Swedish are linked via an A’-chain rather than an A-chain, since A’-chains are not sensitive to intervening arguments (Chomsky 1977). In this regard, Swedish TCs are like their English counterparts, but different from German TCs, as discussed in Wurmbrand (2003).

\[(48)\] a. * Dieses Buch ist schwer Hans zu überzeugen zu lesen.
   ‘This book is hard to convince John to read.’

b. This book was easy to convince John to read.
   (Wurmbrand 2003:29)

Wurmbrand (2003) argues that sentences like (48a) are ill-formed in German because German TCs involve A-movement all the way from the embedded clause. A-movement is possible since the embedded clause has a reduced clause structure and lacks both the subject position and the head associated with accusative case.\(^{29}\) In this

\(^{29}\) Wurmbrand’s analysis is in some ways similar to the analysis in Nanni (1978, 1980). Nanni also posits an ‘incomplete’ structure inside the TC. On this analysis, the adjective and the infinitival clause are reali-
way, issues associated with early raising analyses of TCs (Rosenbaum 1967; Postal 1971) do not arise. As will be discussed in Sect. 4.3 below, Swedish TCs are also likely to have a reduced embedded clause structure, although, unlike in German, they involve A’-movement rather than A-movement.

Further support for an A’-movement step in the embedded clause comes from the observation that TCs in Swedish license parasitic gaps, (49a)–(49c). Crucially, parasitic gaps are not licensed in structures involving only A-relations, such as passives, (49d):

(49) a. Bok-en₁ är lätt att kritisera ___₁ utan att ha läst pg₁. book-CMN.DEF is easy to criticize without to have read [aTC]
   ‘The book is easy to criticize without having read.’

b. Bok-en₁ går lätt att kritisera ___₁ utan att ha läst book-CMN.DEF goes easily to criticize without to have read pg₁. [vTC]
   ‘The book is easy to criticize without having read.’

c. Bok-en₁ går att kritisera ___₁ utan att ha läst book-CMN.DEF goes to criticize without to have read pg₁.[vTC]
   ‘The book is possible to criticize without having read.’

d. * Bok-en₁ kan kritiseras/ bli kritiserad ___₁ utan book-CMN+DEF can criticize-PASS/ become criticized without att ha läst pg₁. to have read [passive]
   ‘The book can be criticized without having read.’

Taken together, these observations suggest that TCs in Swedish involve A’-movement in the embedded clause. In the next section I look at two types of analysis that have been proposed for English TC, both involving A’-movement of an Operator in the embedded clause. Both types are problematic, however, and in Sect. 4.3 I therefore propose a different analysis for Swedish TCs.

4.2 The matrix subject: Base-generation or smuggling

There are different ways in which an A’-moved element could be linked to the matrix subject. Broadly speaking, A’-analyses of TCs either assume that this is achieved through further movement into the subject position (movement analyses) or via a base-generated subject that enters into an interpretive relation of some kind with the A’-moved element (an Operator) in the embedded clause (base-generation analyses).

The base-generation analyses have in common that the subject of the TC is merged in a non-theta position, matrix Spec,TP (e.g. Chomsky 1977; Browning 1989; Heycock 1994; Rezac 2006; Engdahl 2012; Fleisher 2015; Keine and Poole 2016). Via a analyzed as a complex adjective (see also Chomsky 1981), making movement from the object position into the matrix subject position unproblematic. Nanni’s analysis differs from the one in Wurmbrand (2003), however, in positing a biclausal structure that becomes reduced (monoclusal) in the reanalysis.
relation (of some kind) between the subject and the moved element, a link between these two is formed and, as a result, the subject and the Operator share the same theta-role.

(50) The books$_i$ are easy [OP$_i$ PRO to read $t_i$]

Base-generation analyses predict that neither subjects with reflexives bound in the embedded clause, nor narrow scope readings of quantified subjects should be possible in TCs. As we have seen, however, neither of these predictions is borne out for Swedish. Analyses that assume $A'$-movement to be followed by another movement step into the matrix subject position fare better in this respect. Like base-generation analyses, movement analyses can also account for the fact that intervening arguments are allowed and parasitic gaps are licensed. One such analysis has been proposed by Hicks (2009) (see also Hornstein 2001). On Hicks’s analysis, the DP that is to become the subject is embedded in a bigger DP which also hosts an Operator, (51) (see also Kayne 2002, for a similar analysis of pronouns and their antecedents).

(51) The whole complex DP $A'$-moves to the edge of the embedded clause, as is expected of Operators. Via this movement step, the embedded DP is smuggled with the Operator across the embedded subject position. After this, the embedded DP, which lacks case, A-moves independently to the matrix subject position as it functions as a goal for the probe T.$^{30}$

(52) The books$_i$ are easy (for Kate) [$CP[DP Op t_i]$ to read $t_j$]

On Hicks’s analysis, TCs are thus derived via a combination of $A'$- and A-movement made possible by the complex structure of the embedded object DP. More specifically, two chains are formed: the complex DP forms an $A'$-chain with its trace position, while the matrix subject forms an A-chain with the trace inside the complex DP. Although it successfully accounts for the binding and scope properties of TCs as well as the licensing of parasitic gaps, the smuggling analysis proposed by Hicks (2009) raises a potential problem as it involves movement steps that are not generally allowed.

4.3 Improper Movement and clause size

The combined $A'$- and A-movement analysis proposed by Hicks (2009) could be argued to involve Improper Movement (Chomsky 1973, 1981). The ban on Improper

$^{30}$The embedded DP cannot receive case DP-internally as DP-internal DPs need a preposition to get case in English (Hicks 2009:547).
Movement is such that if an element has moved into an A′-position, it cannot subsequently move into an A-position. Williams (1974, 2003) relates this to the functional sequence of the clause (The Williams Cycle), stating that movement into a position that is lower on the functional sequence than the position moved from is banned (see also Abels 2007; Müller 2014). The sentences in (53) are ill-formed because they involve such illegitimate movement steps: in each case, the subject has moved through a position, embedded Spec,CP, that is higher on the hierarchy than the final landing site, matrix Spec,TP.

(53) a. * Mary<sub>1</sub> seems [<i>CP</i> t<sub>1</sub> that [<i>TP</i> t<sub>1</sub> read the book.]]

b. * Mann-en<sub>1</sub> sade-s [<i>CP</i> t<sub>1</sub> att [<i>TP</i> t<sub>1</sub> hade blivit rånad.]]

If TCs are derived via the movement steps proposed by Hicks (2009), it seems, prima facie, that they involve Improper Movement, as there is movement via embedded Spec,CP into matrix Spec,TP. In response to this, Hicks stresses the point that the two movement operations involve different DPs (although one is embedded under the other), creating two different chains, so that there is no Improper Movement. It is still the case though that such movement steps are otherwise ill-formed in English, as discussed by Keine and Poole (2017) (the example is originally from Abels (2007:77) who discusses it in the context of remnant movement):

(54) *Oscar<sub>1</sub> was asked [[ how likely t<sub>1</sub> to win ]<sub>2</sub> it was t<sub>2</sub> ]

In (54), the infinitival clause (subscript 2) has undergone A′-movement to the clause edge, and the subject Oscar has A-moved out of it to the matrix subject position. In (54), the ill-formedness can be formulated as a violation of the Freezing principle, as it involves movement out of a string that has itself moved. Although the smuggling derivation proposed by Hicks (2009) differs from (54) in involving a null wh-Operator and a DP rather than a clause, the smuggling derivation proposed is sufficiently similar to the illicit one in (54) to beg the question how Freezing is circumvented in TCs.

I propose an analysis of Swedish TCs that combines A′- and A-movement but in which Freezing is not an issue and other Improper Movement effects are also avoided. On this proposal, Swedish TCs are structurally somewhere in between German and English TCs. They are like German TCs in that the object moves all the way from the embedded clause to the matrix subject position, but they are also like English TCs in that they include an A′-step in the embedded clause. According to Wurmbrand (2003), lacking A′-properties, German TCs are derived via long A-movement from the structurally reduced embedded clause into the matrix clause. In Swedish too, infinitival clauses are not full CPs, as pointed out by a reviewer and shown by Engdahl (1986:91–92). Since infinitival clauses do not have a full CP structure, embedded infinitival interrogatives are not possible, (55), and neither is pied-piped material in infinitival relative clauses, (56) (examples from Engdahl 1986:91–93)

(55) a. * Alla undrade vad (att) göra.

Everyone wondered what to do

* Intended: ‘Everyone wondered what to do.’
b. * Alla undrade om/huruvida (att) åka.
   everyone wondered if/whether go
   Intended: ‘Everyone wondered whether to go.’

(56) a. ett rum att arbeta i ___
   a room to work in
   ‘a room to work in’

b. * ett rum i vilket att arbeta [p p ___]
   a room in which to work
   ‘a room in which to work’

In TCs, the object first moves to the embedded clause edge, and then further into the matrix clause. Although the first step is to an A’-position, there is no Improper Movement, since the embedded clause edge is a position lower than a CP. I will take it to be some projection in the T domain. In that way, the movement operation does not violate the Williams Cycle. The proposed analysis accounts for the absence of intervention effects and for the fact that parasitic gaps are licensed. It also captures the scope and binding properties of TCs in Swedish.

5 Concluding remarks

This paper presents two novel findings: I show that there is a strong connection between \( \phi \)-feature agreement and scope freezing in Swedish, and I demonstrate that Swedish TCs involve movement of the underlying object into the matrix subject position.

I follow Sauerland and Elbourne (2002) in assuming reconstructed readings are not achieved via lowering or other undoing operations, but instead to reflect the final syntactic position of an element. In Swedish, movement related to \( \phi \)-feature agreement is syntactic but purely EPP-driven movement (not involving \( \phi \)-feature agreement) is post-syntactic. Subjects of adjectival predicates marked for common gender or plural have undergone \( \phi \)-agreement, while subjects of verbal, nominal and adjectival predicates marked for neuter have not. The former are interpreted in the surface position (i.e. the subject position) for scope purposes (i.e. they get wide scope relative to quantified elements lower down), while the latter can either be interpreted in their syntactic position (i.e. the object position, where they have narrow scope relative to another quantifier) or in the higher position, achieved via Quantifier Raising at LF. These patterns can be observed in TCs, passives and raising structures, all three of which come with both adjectival and verbal predicates.

The second finding concerns TCs more specifically. TCs in Swedish are like English ones in having A’-properties; they license parasitic gaps and are not sensitive to arguments intervening between the embedded object position and the matrix subject. Unlike English TCs, Swedish TCs can have a reflexive element in the subject bound in the embedded clause. For Swedish, then, there is evidence for movement of the object all the way from the embedded clause, involving an initial A’-step. Since infinitival clauses in Swedish have been shown to have a smaller structure than a
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full CP (Engdahl 1986), movement of the object does not violate the Williams Cycle (Williams 2003) and is therefore not an instance of Improper Movement. German TCs lack the A’-properties of English and Swedish TCs and are analyzed as being derived via long A-movement (Wurmbrand 2003). On the proposed analysis, Swedish TCs can be placed in between the English type and the German type.

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Appendix: Stress and scope in passives

Stress can play a role for the interpretation of scope in passives. This is most clearly the case when the sentences contain negation. In (57), for instance, stress on the quantifier, NÅgon (‘some’), favours the surface scope reading on which the quantifier is interpreted above negation and the verb, while stress on the noun, förKORTning (‘abbreviation’), favours the reconstructed, narrow scope, reading, on which the quantifier is interpreted below negation and the verb.

(57)  a. NÅgon förkörtning accepterade-s inte av förlag-et.  
      some abbreviation accepted-PASS not by publisher-NEUT.DEF  
      ‘Some abbreviation was (such that it was) not accepted by the publisher.’  
      ∃ > ¬ accepted, *¬ accepted > ∃  

   b. Någon förKORTning accepterade-s inte av förlag-et.  
      some abbreviation accepted-PASS not by publisher-NEUT.DEF  
      ‘The publisher didn’t accept any abbreviation.’  
      ∃ > ¬ accepted, ¬ accepted > ∃

For periphrastic passives, the pattern in (57) holds when the participle is neuter-marked, (58), but does not hold as generally when the participle is marked for common gender, (59), or plural, (60). That is, not everyone accepts stress on the noun for sentences such as (59b) or (60b) (the speaker variation is indicated as %). For these speakers, such sentences are simply odd, and for some of the speakers, neuter marking on the participle is instead a possibility with this stress pattern, (59c), (60c).

31Without negation, the patterns in (57)–(60) below are considerably weaker. More precisely, stress on the noun is then often felt to be very odd, and the reconstructed reading is harder to get.
a. NÅGot undantag blev inte acceptera-t av some exception became not accept-NEUT.PTC by förlag-et.
publisher-NEUT.DEF
‘Some abbreviation was (such that it was) not accepted by the publisher.’
∃ > ¬ accepted, *¬ accepted > ∃

b. Något UNDANTag blev inte acceptera-t av some abbreviation became not accept-NEUT.PTC by förlag-et.
publisher-NEUT.DEF
‘The publisher didn’t accept any abbreviation.’
∃ > ¬ accepted, ¬ accepted > ∃

(59) a. NÅGon förkortning blev inte acceptera-d av some abbreviation became not accept-CMN.PTC by förlag-et.
publisher-NEUT.DEF
‘Some abbreviation was (such that it was) not accepted by the publisher.’
∃ > ¬ accepted, *¬ accepted > ∃

b. Någon förKORTning blev inte acceptera-d av some abbreviation became not accept-CMN.PTC by förlag-et.
publisher-NEUT.DEF
‘The publisher didn’t accept any abbreviation.’
∃ > ¬ accepted, % ¬ accepted > ∃

c. Någon förKORTning blev inte acceptera-t av some abbreviation became not accept-NEUT.PTC by förlag-et.
publisher-NEUT.DEF
‘The publisher didn’t accept any abbreviation.’
∃ > ¬ accepted, ¬ accepted > ∃

(60) a. NÅGra förkortningar blev inte acceptera-de av some abbreviations became not accept-PL.PTC by förlag-et.
publisher-NEUT.DEF
‘Some abbreviations were (such that they were) not accepted by the publisher.’
∃ > ¬ accepted, *¬ accepted > ∃

b. Några förKORTningar blev inte acceptera-de av some abbreviations became not accept-PL.PTC by förlag-et.
publisher-NEUT.DEF
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‘The publisher didn’t accept any abbreviations.’
∃ > ¬ accepted, % ¬ accepted > ∃
c. Några KORTningar blev inte accepterat av förlag.

The basic pattern for passives, discussed in Sect. 3.3 above, is that morphological passives allow for reconstructed readings while periphrastic ones do not unless they are marked for neuter gender. With stress, however, this patterns can be altered in two ways as we have just seen. For morphological passives, stress on the quantifier or noun brings out the surface or narrow scope reading, respectively, and more or less blocks the other one. For periphrastic passives, in contrast, stress can, for some but not all speakers, bring forward a reading that was not otherwise possible. With stress on the quantifier, the surface scope reading is favoured, and with stress on the noun the reconstructed reading is favoured. When stress falls on the quantifier, the whole NP is frozen in place, and, consequently, reconstruction fails. When stress falls on the noun, in contrast, the quantifier is not part of the focused portion and is not frozen in place. It can therefore reconstruct. I leave the issue of how Focus interacts with reconstruction possibilities at this.

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