

Idiomatic adjectives as an argument against HEAD Raising*

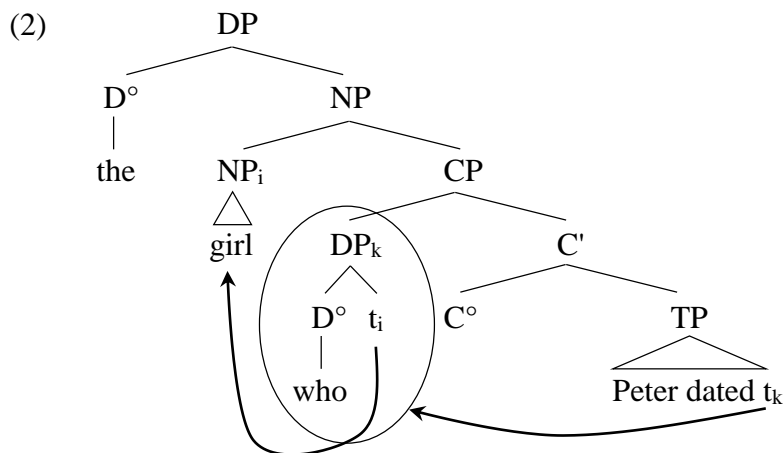
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1. Introduction

There has been much research on relative clauses, and in particular about the way the connection between the head noun and the relativized element is established (Salzmann 2006, 2017 and Pankau 2018 for recent overviews). According to one prominent proposal – the so-called Raising Analysis (Vergnaud 1985, Kayne 1994, Bianchi 1999) – this connection is established via movement. Given a relative clause as in (1), the simplified analysis according to the Raising Analysis looks as shown in (2).

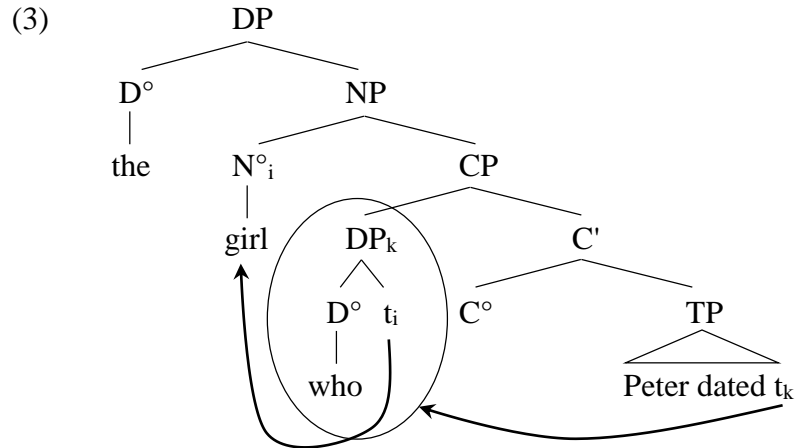
(1) *John met the girl who Peter dated.*



The head noun *girl* and the relativized element *who* form a DP-constituent that originates inside the relative clause. This DP is moved to SpecCP, followed by movement of *girl* to a position outside the relative clause. Importantly, the moved head noun is generally taken to correspond to a phrase, usually an NP.

*I wish to thank the audience of NELS 50 for their feedback, in particular Rajesh Bhatt.

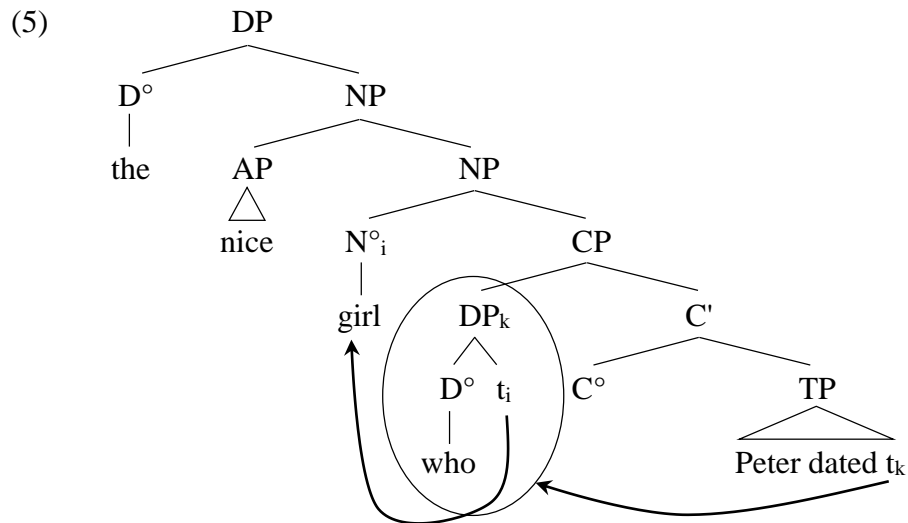
In a series of publications (Cecchetto and Donati 2010, 2015; Donati and Cecchetto 2011), Cecchetto and Donati (henceforth C&D) outline a modified version of the Raising Analysis, called HEAD Raising. The HEAD Raising analysis is identical to the Raising Analysis, except for one point: the moved head noun corresponds to an N° only, that is, to a head (hence the name). The structure that HEAD Raising assigns to the relative clause in (1) is given in (3).



HEAD Raising has to make an additional assumption for cases where the head noun corresponds to something that is evidently phrasal, namely when the head noun contains a modifier, as in an example like (4).

(4) *John met the nice girl who Peter dated.*

The relevant additional assumption that C&D make is that such modifiers are merged after N° is moved out of the relative clauses, as shown in (5).



Instead of moving the NP *nice girl* out of the relative clause, as assumed in the Raising Analysis, only the noun *girl* is moved. The adjective *nice* is merged with the NP that results from the movement of *girl*.

HEAD Raising then makes a strong prediction about adjectival modifiers inside head nouns: such adjectives are predicted to not reconstruct into the relative clause. This is so because the adjective is merged with the head noun after the head noun is moved out of the relative clause. So the adjective at no stage of the derivation occupies a position inside the relative clause.

The aim of this paper is to show that this prediction is wrong. Based on data from German, I argue that there are adjectives that when part of a head noun do reconstruct. I also argue that there is no way to modify HEAD Raising in such a way as to make it compatible with the reconstruction of adjectives contained in head nouns. The remainder of the paper is structured as follows. In section 2, I introduce the relevant set of adjectival modifiers, namely adjectives that induce an idiomatic reading, which I dub *idiomatic adjectives*. In section 3, I show that idiomatic adjectives reconstruct into relative clauses. In section 4, I introduce three modifications of HEAD Raising that seem to make the reconstruction properties of idiomatic adjectives compatible with the idea that only an N^0 is moved out of the relative clause. However, I then argue that each modification either leads to new empirical problems or is incompatible with basic properties of German syntax.

2. Idiomatic adjectives in German

German possesses a number of adjectives that induce an idiomatic reading. What I mean by ‘induce’ is simply that the idiomatic reading of some phrase depends on the presence of a specific adjective. In (6-8), some relevant examples are illustrated for DP-idioms (6), transitive VP-idioms (7), and other VP-idioms (8).

- | | | | |
|-----|---|-----------------------|--|
| (6) | <i>kalter Kaffee</i> | cold coffee | ‘outdated information’ |
| | <i>harter Hund</i> | hard dog | ‘tough person’ |
| | <i>heißes Eisen</i> | hot iron | ‘controversial topic’ |
| | <i>unbeschriebenes Blatt</i> | blank sheet of paper | ‘someone unknown’ |
| (7) | <i>dicke Bretter bohren</i> | to drill thick blanks | ‘to have a tedious task’ |
| | <i>große Töne spucken</i> | to spit big tones | ‘to talk big’ |
| | <i>eine ruhige Kugel schieben</i> | to push a quiet ball | ‘to have it easy’ |
| | <i>reinen Wein einschenken</i> | to serve pure wine | ‘to tell the truth’ |
| (8) | <i>jemandem schöne Augen machen</i> | | <i>etwas auf die lange Bank schieben</i> |
| | someone beautiful eyes make | | something on the long bench push |
| | to make someone beautiful eyes | | to push something down the long bench |
| | ‘to flirt with someone’ | | ‘to procrastinate’ |
| | <i>etwas an die große Glocke hängen</i> | | <i>sich mit fremden Federn schmücken</i> |
| | something on the big bell hang | | oneself with foreign feathers adorn |
| | to hang something on the big bell | | to adorn oneself with foreign feathers |
| | ‘to spread information’ | | ‘to take false credits’ |

In the examples in (6-7), the German idioms are set in italics, followed by their respective literal and non-literal translation; in (8), a word-by-word translation is included right below the German idiom.

That the expressions in (6-8) are idioms is suggested by their non-compositional meaning. For example, *Kaffee* ‘coffee’ by itself can never refer to the meaning ‘information’, nor can *Hund* ‘dog’ by itself ever refer to ‘person’. What is more important is that the adjectives in all the examples in (6-8) are required to obtain the idiomatic reading. Two pieces of evidence confirm this claim.

First, similar to other parts of idioms, the adjectives in (6-8) cannot be left out. This is shown in (9) for the first idioms of (7) and (8), respectively.

- | | | | | |
|-----|----|--|----|---|
| (9) | a. | <i>Bretter bohren</i>
√ ‘to drill blanks’
* ‘to have a task’ | b. | <i>jemandem Augen machen</i>
√ ‘to produce eyes for someone’
* ‘to interact with someone’ |
|-----|----|--|----|---|

The example in (9a) shows that leaving the adjective *dicke* out from the expression *dicke Bretter bohren* results in the literal meaning of that expression only. Not even an underspecified idiomatic meaning like ‘to have a/some task’ is available. Similarly in (9b). Leaving out *schöne* from the expression *jemandem schöne Augen machen* only results in a literal meaning; and again, not even an underspecified idiomatic meaning is available.

Second, the adjectives cannot be replaced by near-synonymous adjectives without the loss of the idiomatic reading, as illustrated in (10-12) for the respective first idioms of (6-8).

- | | | | | |
|------|----|--|-----------------------|----------------------------|
| (10) | a. | <i>kalter Kaffee</i> ([ˈkafe]) | cold coffee | ‘outdated information’ |
| | b. | <i>kühler Kaffee</i> | cool coffee | * ‘outdated information’ |
| | c. | <i>kalter <u>Kaffee</u></i> ([kaˈfe:]) | cold coffee | * ‘outdated information’ |
| | | | | |
| (11) | a. | <i>dicke Bretter bohren</i> | to drill thick blanks | ‘to have a tedious task’ |
| | b. | <i><u>schwere</u> Bretter bohren</i> | to drill heavy blanks | * ‘to have a tedious task’ |
| | c. | <i>dicke <u>Leisten</u> bohren</i> | to drill thick blanks | * ‘to have a tedious task’ |
| | | | | |
| (12) | a. | <i>jemandem schöne Augen machen</i>
to make someone beautiful eyes
‘to flirt with someone’ | | |
| | b. | <i>jemandem <u>attraktive</u> Augen machen</i>
to make someone attractive eyes
* ‘to flirt with someone’ | | |
| | c. | <i>jemandem schöne Augen <u>herstellen</u></i>
to produce someone beautiful eyes
* ‘to flirt with someone’ | | |

The examples in (10) show that replacing the adjective *kalter* with the near-synonymous adjective *kühler* results in the loss of the idiomatic reading (cf. 10a vs. 10b); only the literal reading is available. Importantly, the adjective patterns in this respect with other parts of the idiom. There are two nouns *Kaffee* in German, one with stress on the first syllable and one with stress the second syllable. The idiomatic reading requires the one with stress in the first syllable; the one with stress on the second syllable results in the loss of the idio-

matic reading (cf. 10a vs. 10c). Similarly for the examples in (11-12): replacing the adjective *dicke* and *schöne* with the near-synonymous adjectives *schwere* and *attraktive*, respectively, results as much in the loss of the idiomatic reading as replacing other parts of the idioms with near-synonymous words. What the data in (10-12) then show in sum is that the adjectives in (6-8) are required for the idiomatic reading of these expressions.

3. Reconstruction of idiomatic adjectives

Having established that German possesses idiomatic adjectives, I now turn to their reconstruction properties and the problems these pose for HEAD Raising.

Idioms containing idiomatic adjectives pattern with other idioms that they are fine in relative clauses, like *pull the strings* in English, as shown in (13-14).

(13) *Parky pulled the strings that got me the job.* (McCawley 1981: ex. 57b)

- (14) a. *Wir müssen auch die dicken Bretter bohren, die noch vor uns liegen.*
we must also the thick blanks drill that still before us lie
'We also have to get the tedious tasks done that are still ahead of us.'
b. *Er hat ihr schöne Augen gemacht, die sie sofort erwiderte.*
he has her beautiful eyes made that she immediately replied
'He flirted with her to which she immediately responded.'

What (13-14) show is that subparts of an idiom can be relativized on, *strings* in (13), *dicken Bretter* in (14a), and *schöne Augen* in (14b). Although this is a potential problem for any version of the Raising Analysis quite generally, and hence also for HEAD Raising, I have nothing further to say about this issue in this paper.

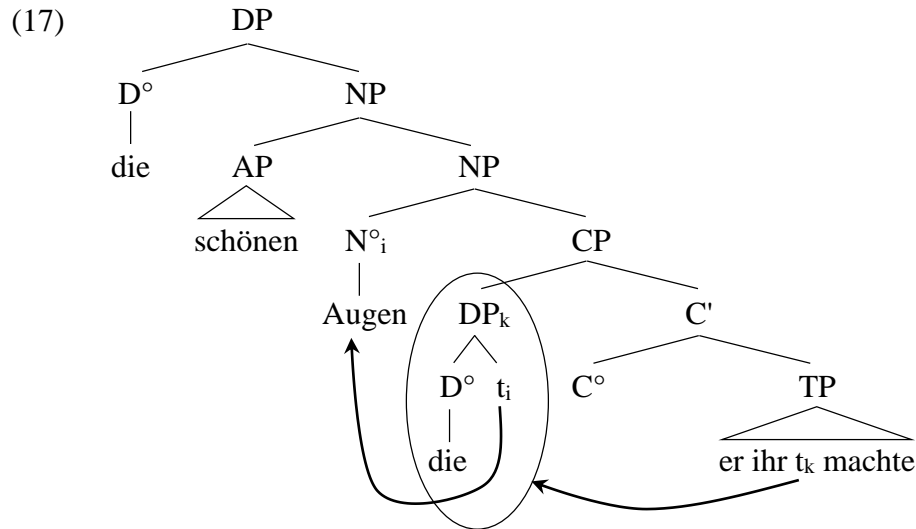
The real problem that HEAD Raising faces comes from reconstruction data. As is well known, idiom chunks reconstruct into relative clauses. This is shown in (15) for the idiom *pull the strings*.

(15) *The strings that Parky pulled got me the job.* (McCawley 1981: ex. 59)

Importantly, this carries over to idioms containing idiomatic adjectives. In particular, when the idiom chunk contains an idiomatic adjective, the idiomatic adjective reconstructs into the relative clause, resulting in the idiomatic reading inside the relative clause. This is shown in (16) for the two idioms in (14).

- (16) a. *Er sprach mit ihm über die dicken Bretter, die noch zu bohren sind.*
he spoke with him over the thick blanks that still to drill are
'We talked with him about the tedious tasks that still need to be dealt with.'
b. *Die schönen Augen, die er ihr machte, wurden ihm zum Verhängnis.*
the beautiful eyes that he her made became him to.the fatality
'That he flirted with her turned out to be fatal for him.'

That idiomatic adjectives reconstruct into the relative clause is evidently a problem for HEAD Raising. The structure HEAD Raising assigns to the sentence (16b) is given in (17).



The head noun *die schönen Augen* in (17) contains an NP consisting of the adjective *schönen* and the noun *Augen*. The material that is moved out of the relative clause is only the noun *Augen*. The adjective *schönen* is merged after the noun *Augen* is moved out of the relative clause. The adjective *schönen* is hence at no stage of derivation part of the relative clause, so it should not be able to reconstruct. Consequently, the structure in (17) is predicted to lack the idiomatic reading inside the relative clause. The problem is that the idiomatic reading is available inside the relative clause, so the adjective *schönen* must reconstruct into the relative clause. But this is of course incompatible with the approach of HEAD Raising for the analysis of adjectival modifiers contained in head nouns, namely that adjectival modifiers are late merged.

4. Three non-solutions

In order to capture that idiomatic adjectives reconstruct, HEAD Raising could resort to at least three solutions.

First, proponents of HEAD Raising could argue that the idiomatic adjective, the head noun N° , and the relativized element do form a constituent inside the relative clause, and that the N° and the idiomatic adjective are moved out of the relative clause, but in two separate movement steps. This would make the idiomatic adjective part of the relative clause, but preserve the core idea that relative clauses are formed by movement of an N° only.

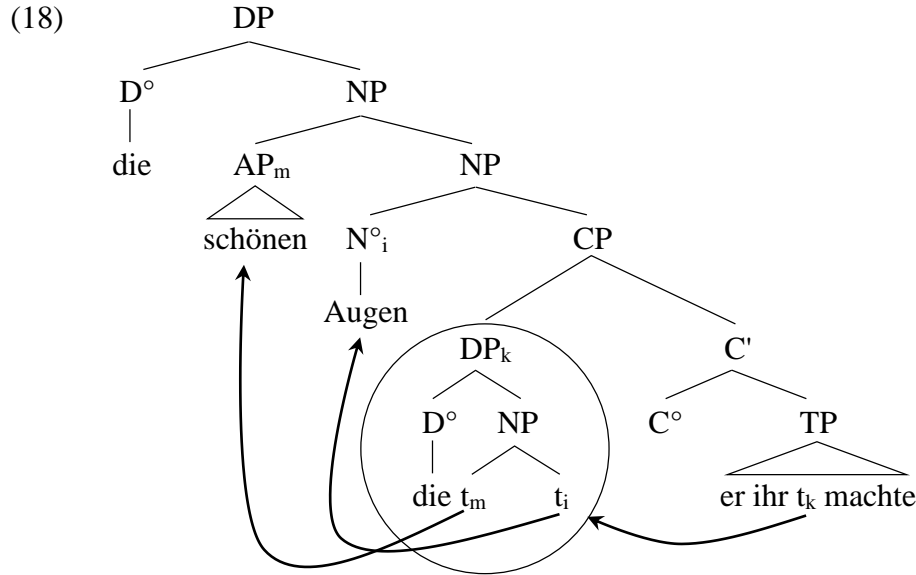
Second, proponents of HEAD Raising could argue that the idiomatic adjective and the head noun N° form a complex $[N^\circ A^\circ + N^\circ]$ -head that is moved out of the relative clause, followed by excorporation of the idiomatic adjective. Under this analysis, the idea that relative clauses are formed by movement of an N° is saved by allowing complex heads.

Third, proponents of HEAD Raising could adopt the brute force solution that the idiomatic adjective reconstructs via some non-syntactic mechanism into the relative clause. This saves the analysis that only moved N° s are involved in the formation of relative clauses by relegating reconstruction to some non-syntactic component of the grammar.

I will argue in the following subsections that all three solutions are either empirically inadequate or result in the loss of generalizations about the syntax of German.

4.1 Against movement of the adjective

The first way to deal with the reconstruction of idiomatic adjectives is to assume that these also move out of the relative clause, but in a separate movement step, as shown in structure (18) for example (16b).



In a first step, the DP *die schönen Augen* is moved to SpecCP; then the N° *Augen* is moved out of the relative clause, followed by movement of the AP *schöne*. From a theoretical point of view, nothing speaks against such a derivation. It preserves the original idea HEAD Raising is grounded on, namely that movement of N° takes place to relabel the structure from CP to NP. Nor does this derivation violate the Complex NP Constraint (CNPC) because the CNPC only prohibits movements out of relative clauses that also cross the DP-node. But in (18), the movement of the AP *schönen* takes place internal to the DP. This solution nevertheless needs to be rejected because it faces three problems.

First, it requires that DPs with an idiomatic adjective can be affected by movement in the first place. Although DPs in German can be targeted by movement, resulting in so-called *split-NPs* (Ott 2012 for a recent overview), this movement cannot target DPs containing idiomatic adjectives (Ott 2012: 46; Nolda 2007: 89-90). Witness the contrast between (19a) and (19b).

- (19) a. *Frauen_i hat er mir [schöne t_i] vorgestellt.*
 women has he me beautiful introduced
 ‘As for women, he introduced beautiful ones to me.’
- b. *Augen_i hat er ihr [schöne t_i] gemacht.*
 eyes has he her beautiful made
 √ ‘He made her beautiful eyes.’
 * ‘He flirted with her’

In (19a), a DP with a non-idiomatic adjective is targeted by subextraction, which is fine. In (19b), a DP with an idiomatic adjective is targeted by subextraction, resulting in the loss

of the idiomatic reading. So (18) cannot be the correct structure for DPs with idiomatic adjectives, simply because such DPs cannot be targeted by movement to begin with.

Second, the relevant movement steps in (18) result in an ordering between the adjective and the noun that preserves their original order: *schönen* precedes *Augen* both in the pre- and in the post-movement structure. However, it is well-known that the original order between the adjective and noun must not be preserved with split NPs in German, as (20) shows.

- (20) * *Schöne_i hat er mir [t_i Frauen] vorgestellt.*
 beautiful has he me women introduced
 ‘He introduced beautiful women to me.’

Crucially, the effect seen in (20) does not reduce to an interaction of independent principles of German syntax. One could suggest that (20) only shows that if an adjective is moved out of a DP, the noun of that DP is required to also undergo movement prior to the movement of the adjective. Moving the noun first to SpecCP followed by movement of the adjective is precluded because German lacks multiple SpecCP-positions. In (18), however, the landing sites for the noun and the adjective are distinct and the original order can be re-established. But this line of reasoning does not go through. Consider first example (21).

- (21) *Peter hat Frauen_k bisher [schöne t_k] gesehen.*
 Peter has women so.far beautiful seen
 ‘As for women, Peter so far saw beautiful ones.’

The example in (21) shows that the noun subextracted from a DP need not target SpecCP as the first landing site, but that it can also target some clause internal scrambling position. If the preservation of the original order between adjective and noun were only due to the non-availability of a second landing site, moving the adjective in (21) to SpecCP should be licit because SpecCP would be the relevant second landing site. But as (22) shows, this is not the case.

- (22) * *Schöne_i hat Peter Frauen_k bisher [t_i t_k] gesehen.*
 beautiful has Peter women so.far seen
 ‘Peter so far saw beautiful women.’

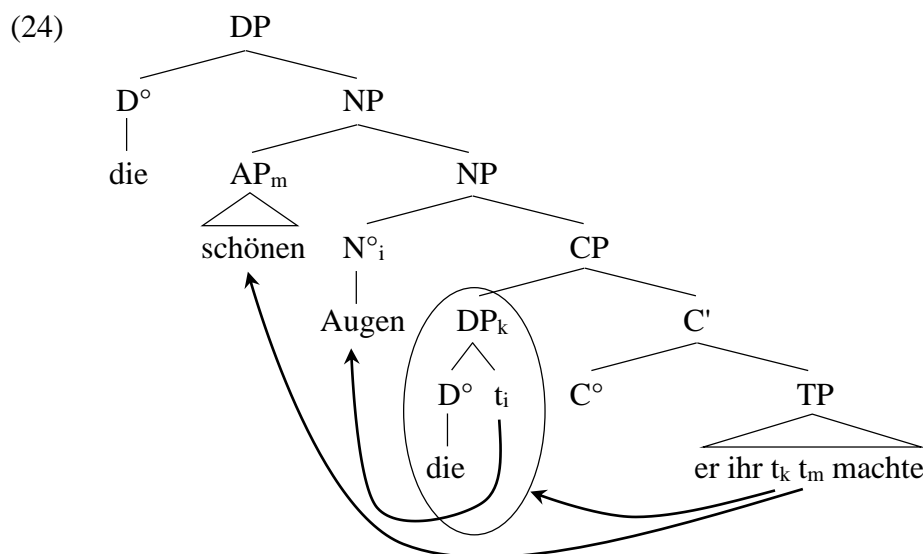
So the preservation of the order between adjective and noun in (18) is a problem.

Third, note that under HEAD Raising, the noun *Augen* and the adjective *schönen* in (18) move for different reasons. The movement of *Augen* is mandatory in order to relabel the structure from CP to NP. But the movement of *schönen* is optional. This then predicts that it should be fine to strand the adjective together with the determiner of the DP in SpecCP of the relative clause. However, this option is totally out, independent of the idiomatic status of the adjective, as the examples in (23) show.

- (23) a. * *Die Frauen_k, [die schönen t_k] i er t_i sah, kannte er nicht.*
 the women the beautiful he saw knew he not
 ‘He didn’t know the beautiful women he saw.’

- b. * *Die Augen_k, [die schönen_{t_k]_i er ihr t_i machte, wurden ihm}*
the eyes the beautiful he her made became him
zum Verhängnis.
to.the fatality
‘That he flirted with her turned out to be fatal for him.’

The problem that adjectives cannot strand in SpecCP could be circumvented if instead of (18) the structure in (24) is adopted.



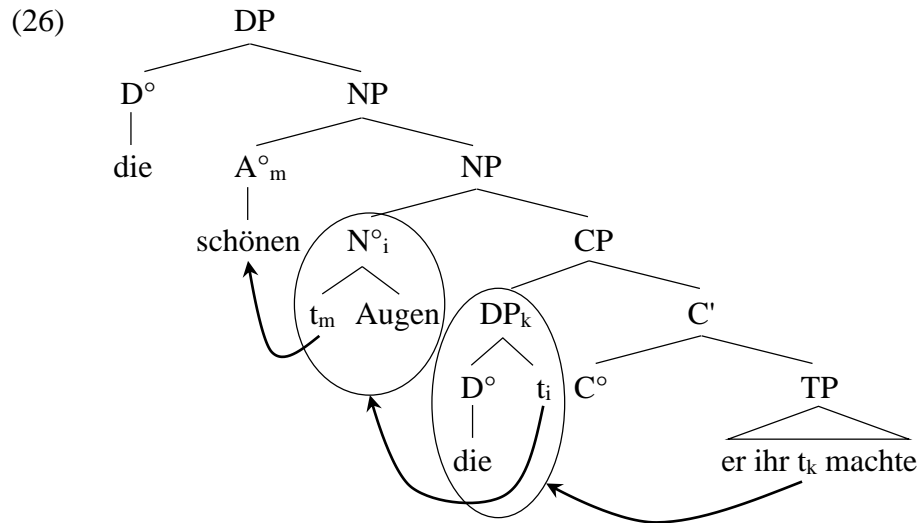
In (24), the adjective is moved out of the DP before that DP moves to SpecCP. Then the noun moves out of the DP in SpecCP followed by the movement of the adjective from its TP-internal position. This of course solves the problem in (23), but it creates a new one. Since the movement of the adjective in (24) is as optional as in (18), the analysis in (24) predicts that the adjective can be stranded inside the relative clause. This boils down to the claim that split NPs can be relativized on; but as is well-known (Haider 2010: 4), this is impossible, as illustrated in (25).

- (25) * *Die Frauen, die_i ich [schöne_{t_i]_i kenne, hat er gesehen.}*
the women that I beautiful know has he seen
‘He saw women such that I know beautiful ones.’

In sum, the idea that the adjective moves out of the relative in a second step must be rejected.

4.2 Against excorporation

The second way to deal with the problem that idiomatic adjectives reconstruct is to suggest a kind of smuggling approach. Upon movement of the noun, the adjective is moved out as well, because the adjective is part of the noun: they form a complex N°-head: [N° A° + N°]. After the movement of that complex N°, the adjective excorporates, as shown in (26).



This analysis elegantly circumvents the problem and is compatible with the idea that only an N° moves. And although it looks a bit *ad hoc*, it nicely captures two properties of adjectives. On the hand, it captures that that nominal modification via adjectival incorporation is cross-linguistically well-attested (Dahl 2004: 225-236; Dahl 2015; Rießler 2016). On the other hand, it also captures that some idiomatic adjectives in German alternate with complex N° -heads of the form $[N^\circ A^\circ + N^\circ]$, as illustrated in (27).

- (27)
- | | | |
|-----------------------------------|---|--|
| <i>Schwarzes Meer</i> ‘Black Sea’ | – | <i>Schwarzmeerflotte</i> ‘Black Sea Fleet’ |
| <i>Rotes Kreuz</i> ‘Red Cross’ | – | <i>Rotkreuzschwester</i> ‘Red Cross nurse’ |
| <i>Silberne Hochzeit</i> | – | <i>Silberhochzeit</i> ‘silver wedding’ |

Despite its attractiveness, the analysis faces one serious problem.

All the examples in (27) involve doublets where the respective idiomatic readings are identical. But there also exist doublets where the respective idiomatic readings differ. Two examples are given in (28).

- (28)
- | | | | |
|----|--------------------------------|---|--------------------------------------|
| a. | <i>dicker Kopf</i> ‘hangover’ | – | <i>Dickkopf</i> ‘stubborn person’ |
| | fat head | | fat-head |
| b. | <i>Hohes Haus</i> ‘parliament’ | – | <i>Hochhaus</i> ‘high rise building’ |
| | high house | | high-house |

The examples in (28a) show that the combination of *dick* ‘fat’ and *Kopf* ‘head’ can result in two different idiomatic readings, depending on the way they are combined. When they form a nominal phrase of the form *dicker Kopf*, then the idiomatic reading is ‘hangover’. But when they form a complex nominal head, then they still receive an idiomatic reading, but one that differs from the idiomatic reading of the corresponding phrase, namely ‘stubborn person’. The examples in (28b) show the same effect for the combination of *hoch* ‘high’ and *Haus* ‘house’.

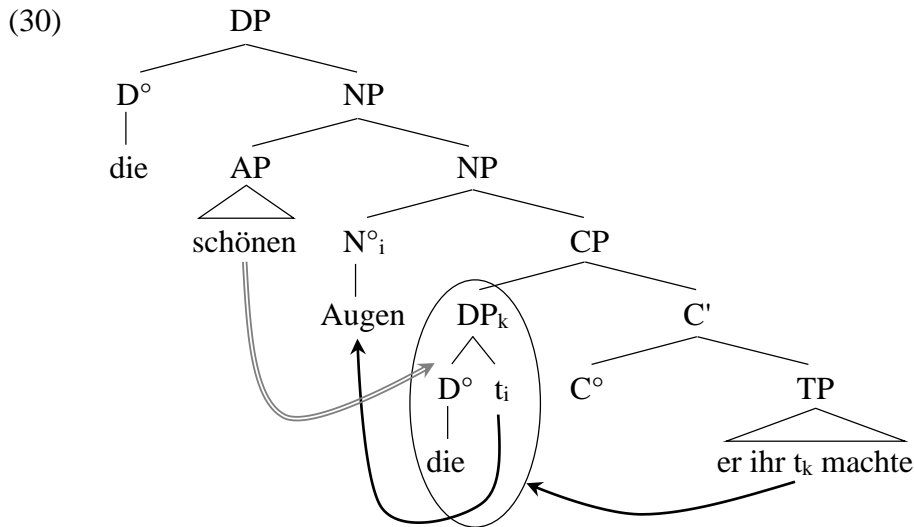
The problem the analysis in (26) faces becomes apparent when an idiom like *dicker Kopf* is the head noun of a relative clause, as shown in (29).

- (29) *Der dicke Kopf, den_i du t_i hast, kommt von dem vielen billigen Lambrusco.*
 the fat head that you have comes from the much cheap Lambrusco
 ✓ ‘The hangover that you have is due to all the cheap Lambrusco.’
 * ‘The hangover such that you’re stubborn is due to all the cheap Lambrusco.’

Under the analysis in (26), *dicke Kopf* starts out as *Dickkopf* internal to the relative clause. *Dickkopf* then moves out of the relative clause, followed by excorporation of the adjective *dick*. So what gets reconstructed into the relative clause is not the phrase *dicke Kopf*, but the complex nominal head *Dickkopf*. Since the idiomatic readings of *dicke Kopf* and *Dickkopf* differ, the analysis in (26) predicts that internal to the relative clause, the idiomatic reading of *Dickkopf* is present, but that external to the relative clause, the idiomatic reading of *dicker Kopf* is present. But as the indicated readings for (29) reveal, this prediction is not borne out: what gets reconstructed into the relative clause is the idiomatic reading that is present relative clause externally. So (26) cannot capture the reading that example (29) has. Conversely, the second, ungrammatical reading of (29) is precisely the reading that the analysis in (26) predicts. Given the impossibility of the analysis in (26) to deal with such a basic observation as the reconstruction of a head noun’s idiomatic reading, it has to be rejected as well.

4.3 Against non-syntactic reconstruction

The third and final way to handle the problem that idiomatic adjectives reconstruct is to assume the brute force solution, namely that idiomatic adjectives reconstruct back into the relative clause via some non-syntactic operation. This is shown in (30), where the double-shafted double arrow indicates ‘non-syntactic reconstruction’.



No matter how this mechanism is eventually conceived of, there is still one single condition that has to be satisfied in order for any such mechanism to apply: the relative clause has to be syntactically well-formed. So the analysis in (30) predicts all cases of reconstructed idiomatic adjectives to be based on syntactically independently well-formed relative clauses. But this prediction is not borne out: there are fine cases of reconstructed idiomatic

adjectives that target relative clauses that under the analysis in (30) are not well-formed syntactically.

The relevant data showing this come from idioms where an idiomatic adjective is combined with a noun such that the noun can only appear in this specific idiomatic adjective-noun combination. The idioms in (31) provide some examples for this.

- (31)
- | | |
|---------------------------------------|----------------------------|
| <i>halbes <u>Hemde</u></i> | ‘weak person’ |
| <i>starker <u>Tobak</u></i> | ‘strong stuff’ |
| <i>fröhlich <u>Urständ</u> feiern</i> | ‘to rear one’s head again’ |
| <i>üble <u>Nachrede</u></i> | ‘defamation’ |

In all these examples, the underlined nouns do not exist as nouns that can be used independently. In the first example of (31), the idiom requires the noun *Hemde*, which is of course related to the noun *Hemd* ‘shirt’ in German. But not only is the idiomatic reading lost when *Hemde* is replaced by *Hemd*, the noun *Hemde* itself cannot be used to refer to ‘shirt’ in German anymore. Similarly for *Tobak* in the second example in (31) and its related version *Tabak* ‘tobacco’. The last two examples in (31) differ from the previous two ones because here, the relevant nouns are not related to any other independently used noun: neither *Urständ* nor *Nachrede* have any cognates in present-day German and hence lack any independently specifiable meaning.

What makes the idioms in (31) relevant is that they all make fine head nouns, as shown in (32).

- (32)
- | | |
|----|---|
| a. | <i>Das halbe Hemde, das_i t_i hier Ärger macht, schlägt doch jeder.</i> |
| | the half ??? that here trouble makes beats PRT everyone |
| | ‘Everyone can beat that weak person that makes trouble here.’ |
| b. | <i>Es geht um die fröhlichen Urständ, die_i dieser Begriff t_i feiert.</i> |
| | it goes about the happy ??? that this concept celebrates |
| | ‘We discuss the fact that this concept rears its head again.’ |

Consider now the simplified structure of the relative clauses in (32) according to the analysis in (30) before non-syntactic reconstruction applies.

- (33)
- | | |
|----|---|
| a. | [_{CP} das <u>Hemde</u> hier Ärger macht] |
| b. | [_{CP} dieser Begriff die <u>Urständ</u> feiert] |

Given what I said in the preceding paragraph about the idioms in (31), the problem is evident. The relative clauses in (33) are not syntactically independently well-formed because they involve non-existent lexical items. But if these relative clause are not well-formed to begin with, the derivation is predicted to crash and no non-syntactic reconstruction mechanism can ever apply.

In sum, not even the addition of a non-syntactic mechanism for the reconstruction of idiomatic adjectives to HEAD Raising captures the full range of reconstruction data.

5. Conclusion

I argued that HEAD Raising is too restrictive an analysis for relative clauses. Based on data from idiomatic adjectives, I showed that the assumption that head noun internal modifiers are late merged is incompatible with the reconstruction properties of idiomatic adjectives. I showed that the reconstruction properties of idiomatic adjectives can neither be captured by making non-standard assumptions about their syntax, nor by relegating reconstruction to some non-syntactic component. On the positive side, this paper has provided evidence that any analysis of relative clauses must allow for relative clauses with phrasal head nouns.

References

- Bianchi, Valentina. 1999. *Consequences of antisymmetry: headed relative clauses*. Berlin: De Gruyter Mouton.
- Cecchetto, Carlo and Caterina Donati. 2010. On Labeling: Principle C and Head Movement. *Syntax* 13(3): 241-278.
- Cecchetto, Carlo and Caterina Donati. 2015. *(Re)labeling*. Cambridge, MA: MIT Press.
- Dahl, Östen. 2004. *The Growth and Maintenance of Linguistic Complexity*. Amsterdam: John Benjamins.
- Dahl, Östen. 2015. *Grammaticalization in the North*. Berlin: Language Science Press.
- Donati, Caterina and Carlo Cecchetto. 2011. Relabeling heads: A unified account for relativization structures. *Linguistic Inquiry* 42(4): 519-560.
- Haider, Hubert. 2010. *The Syntax of German*. Cambridge, UK: Cambridge University Press.
- Kayne, Richard. 1994. *The antisymmetry of syntax*. Cambridge, MA: MIT Press.
- McCawley, James. 1981. The syntax and semantics of English relative clauses. *Lingua* 53(2-3): 99-149.
- Nolda, Andreas. 2007. *Die Thema-Integration. Syntax und Semantik der 'gespaltenen Topikalisierung' im Deutschen*. Tübingen: Stauffenburg.
- Ott, Dennis. 2012. *Local instability. Split Topicalization and Quantifier Float in German*. Berlin: De Gruyter Mouton.
- Pankau, Andreas. 2018. The Matching Analysis of relative clauses: an argument from anti-pronominal contexts. *The Journal of Comparative Germanic Linguistics* 21(2): 189-245.
- Rießler, Michael. 2016. *Adjective attribution*. Berlin: Language Science Press.
- Salzmann, Martin. 2006. *Resumptive Prolepsis. A Study in indirect A'-dependencies*. Utrecht: LOT.
- Salzmann, Martin. 2017. *Reconstruction and resumption in indirect A'-dependencies*. Berlin: De Gruyter Mouton.
- Vergnaud, Jean Roger. 1985. *Dépendances et niveaux de représentation en syntaxe*. Amsterdam: John Benjamins.

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