

PRE-NOMINAL ADJECTIVAL TRANSPARENT FREE RELATIVES

ALEXANDER GROSU

Tel Aviv University

JOSEF BAYER

University of Konstanz

1 Introduction

This paper is a follow-up to Grosu (2016), and focusses on one aspect of the theory of Transparent Free Relatives (TFRs) that was analyzed in insufficient detail in Grosu (2016) (as well as at the oral presentation based on that paper, which was made by Alexander Grosu at IATL 34). The contributory thrust of the paper concerns adjectival TFRs in pre-nominal position. Much as was done in Grosu (2016) with respect to nominal entity-denoting TFRs, this paper will examine the merits and/or demerits of two competing theories of TFRs insofar as the analysis of pre-nominal adjectival TFRs is concerned.

The paper is structured as follows: Section 2 presents the gist of the proposals in Grosu (2016) that constitute minimally necessary background for ensuring that this paper is self-contained. Section 3 discusses pre-nominal adjectival TFRs. Section 4 is a summary of results.

2 Background Information

TFRs have been the object of numerous earlier studies, an incomplete list being Nakau (1971), Kajita (1977), McCawley (1998), Wilder (1998), van Riemsdijk (1998, 2000, 2001, 2006a,b, 2012, 2017), Grosu (2003, Part II, 2010, 2014, 2016), Schelfhout, Coppen and Oostdijk (2004), den Dikken (2005), van de Velde (2011), Smet and van de Velde (2013), and Yoo (2008). In this paper, we will be concerned with a special type of TFR, in particular, the one described in the title of the paper, and – in the spirit of Grosu (2016) – we will confine ourselves to considering the implications of the relevant empirical facts for two of the existing theories of TFRs: the one

defended in Grosu (2016), and the one argued for by Henk van Riemsdijk in the various studies mentioned in this paragraph.

As indicated in the introduction, this section summarizes the principal claims made in Grosu (2016) concerning the merits and/or demerits of the two theories with respect to nominal entity-denoting data. As also noted in the introduction, this section presents what we view as minimally necessary background for reading section 3 without consulting the earlier literature. For completeness, we note that readers might nonetheless benefit from familiarizing themselves with the pertinent earlier literature.

Illustrations of TFRs, which provide a basis for indicating some of their distinguishing properties, are presented in (1).

- (1) a. He is eating [what *my grandfather thinks* [t is **a pork chop**]].
 b. He is eating [what *I would call* [t **a huge steak**]].

In contrast to (non-transparent) free relatives (FRs), TFRs are **necessarily** introduced by *what* (and its cross-linguistic counterparts)¹, the trace of *what* is **necessarily** in the subject position of a copular structure or small clause (as in (1a) and (1b) respectively), and the relative clause **must** include an explicit or implicit intensional operator (italicized in (1)), without which it is infelicitous. Of course, FRs **may** also exhibit these properties, potentially giving rise to ambiguity, but they do **not in general have to exhibit them** (demonstration omitted).

One sub-element of TFRs that the two theories under consideration analyze very differently is the non-subject of the copular construction or small clause, which appears in boldface in (1), and to which we will refer with the pre-theoretical term 'pivot'. Thus, Grosu (2016) assigns to TFRs the same gross syntactic structure as to FRs, in particular, the one schematically indicated in (2). On this view, the TFRs in (1) are complex DPs headed by a null Det², and the pivot (in boldface) is just what it seems to be, namely, the non-subject of a copular sentence/small clause.

- (2) [_{DP} ∅_{DET} [_{CP} what_i ... [_{IP/SC} t_i (BE) **YP** ...]...]

Van Riemsdijk assigns to TFRs and FRs different syntactic structures (the structure assigned to FRs will not concern us in this paper). For TFRs, he assumes a multi-dimensional framework, in which different clauses may lie in different planes. For TFRs like those in (1), the matrix and the relative clause lie in two distinct planes, as suggested by the schema in (3), where the two clauses do not form a constituent. The clauses are only related by an operation of 'grafting', whose effect, in TFRs, is to re-merge an element of the relative clause, in particular, the pivot, with some sub-element of the matrix clause, with the result that the pivot constitutes 'shared structure.' In (1), the matrix part of the pivot is the direct object of the matrix verb, and plays a role, *mutatis mutandum*, analogous to that of a relative-external 'phrasal head' in a bi-dimensional framework.

- (3) [_{Matrix Clause} **YP_k**]
 [_{CP} what_i ... [_{ZP} what_i (BE) **YP_k** ...]...]

¹ See, however, Schütze & Stockwell (2019) on TFRs introduced by *who* in English.

² While the TFRs in (1) are nominal, TFRs of other categories also exist, in particular, adjectival and adverbial ones. In the latter two cases, the null head of the XP is suitably different.

In our view, the fundamental difference between the two theories lies in their views on the 'headedness' of TFRs. While Grosu views TFRs as headed by a null category, van Riemsdijk views them as 'quasi-headed' by the pivot. The bi- versus multi-dimensional distinction between the two theories follows from the fact that in a bi-dimensional framework, it is unclear how to represent the pivot as a CP-external head when it occupies a string-medial position within the relative, as in the English and German data in (4).

- (4) a. I just saw [what might well be taken for a **meteor** by my neighbours].
 b. Ich werde mir kaufen, [was du als **einen passenden Wagen**
 I will me buy what you as a suitable car
 bezeichnen würdest].
 characterize would
 'I will buy myself what you would describe as a suitable car.'

The two approaches are also driven by different considerations. For van Riemsdijk, the primary motivation for viewing the pivot as an element **shared** by the relative and the matrix was provided by a number of syntactic effects that are typically associated with CP-external heads of complex XPs, for example, the fact that the categorial properties of the TFR necessarily match those of the pivot, and the fact that the pivot agrees in syntactic number with the matrix verb under certain circumstances. An additional motivation was the belief that the pivot is not only syntactically present in the matrix, but also **interpreted** there. For example, (1b) was viewed as having the essential import of (5a), where the TFR is paraphrased by a parenthetical with 'hedging' import. Schelfhout et al (2004) in fact took this view one step further and proposed that the TFR is not only paraphraseable by a parenthetical sentence, but **is in fact** a parenthetical modifier of the pivot, and furthermore claimed that data like (1) are necessarily pronounced with slight intonational breaks in the positions indicated by commas in (5b).

- (5) a. He is eating a huge steak, at least, this is what I would call it.
 b. He is eating, what I would call, a huge steak.

For Grosu (2016), the primary motivation for viewing the pivot as present in the relative clause **only** (at all levels of representation) was semantic. It was pointed out in that study that a parenthetical paraphrase of the kind illustrated in (5a) is completely impossible in some cases, and is also inappropriate in numerous additional cases, albeit more subtly. An example of the former kind is provided by a slight modification of (1a), shown in (6a), which clearly does not have the import of the self-contradictory paraphrase in (6b). An example of the latter kind is (7a), which differs in meaning from the paraphrase in (7b) in that uttering it in no way commits the speaker to the belief that ghosts exist; in contrast, uttering (7b) does commit the speaker to that belief. Note that in (7b), the speaker begins by asserting that 'he' saw a ghost, and then hedges on whether the entity at issue was indeed a ghost, but cannot reject the assumption that ghosts exist without contradicting himself/herself. We suggest that the impression of synonymy between (1b) and (5a) (1b) stems from the fact that the speaker not only asserts the main clause, but is also responsible for the content of the subordinate clause (as its grammatical subject), and may thus be viewed as parenthetically asserting it. – See Grosu (2016 pp. 1254-5 for more detailed illustration and discussion of these matters.

- (6) a. He is eating [what *my grandfather incorrectly thinks* [t is **a pork chop**]].
 b. #He is eating a pork chop, as my grandfather incorrectly thinks.

- (7) a. He saw [what he believes was a ghost].
 b. He saw a ghost, at least, this is what he believes.

As just suggested, the impression that the speaker of (1b) asserts that 'he' is eating a huge steak arguably arises from the fact that the speaker is also the person who calls the eaten object that way. It suffices, however, to use a different expression as subject of the subordinate verb to eliminate that impression. Thus, the example in (8) is in no way contradictory.

- (8) He is eating what Mary would probably call a huge steak, but I disagree, that piece of meat is not particularly large, and moreover is very probably not even a steak.

We have the following comment about the kind of parenthetical analysis proposed by Shelfhout et al (2004), which, we note, was not discussed in detail in Grosu (2016): Insofar as the kind of intonation in (5b) is concerned, we agree that it is possible, but it is certainly **not required** (according to our intuitions, and those of numerous speakers of various languages that we have consulted). Furthermore, we do not see how data like (4) could even be uttered with a suitable parenthetical intonation (Shelfhout et al do not discuss this point).

As far as interpretation is concerned, we draw attention to the fact that the intonational contour at issue makes possible at least two distinct construals, which require radically different analyses (see below). Thus, one construal of (5b) (presumably, the one intended by Shelfhout et al), is essentially equivalent to (5a), with the difference that the hedge is expressed before the assertion of the pivot. Another construal is that the speaker wishes to create suspense before uttering the pivot. It is important to note that if data like (6a) are modified to fit the pattern in (5b), as in (9a), the former kind of construal is impossible, being self-contradictory (just like (6b)), but the latter type of construal is possible, as brought out more explicitly by (9b).

- (9) a. He is eating, what my grandfather incorrectly thinks is, a pork chop.
 b. He is eating, what my grandfather incorrectly thinks is ... a rat, of all things!
 Incredible, what these old people can imagine!

Grosu (2016) rejected the view of TFRs as parenthetical hedges, and proposed instead that their *raison d'être* is to characterize two potentially distinct guises/counterparts of something, which exist at distinct sets of worlds/indices, the guise denoted by the TFR being indeterminate/unspecified at the indices of the matrix. In data like (1a), the counterparts are defined in (potentially) distinct ways in the speaker's and the grandfather's belief-worlds, while in data like (1b), the distinct sets of indices are the belief-worlds of the speaker and those of implied individuals who might disagree with the way in which the speaker characterizes what is eaten. The need for two at least potentially distinct guises is brought out by the fact that when no distinct indices are implied, the result is infelicitous, as in (10a), presumably due to triviality. It suffices, however, to imply the existence of distinct indices by means of focus for infelicity to disappear, as in (10b).

- (10) a. #Bill is eating what is a steak.
 b. Bill is eating what IS a steak, even though Mary has denied that it is one.

Grosu (2016) further proposes that the indeterminate/unspecified status of the guise denoted by the TFR is reflected in the following fundamental difference between FRs and TFRs: While FRs are necessarily construed as definite (a view widely defended in the literature), TFRs are invariably construed as (nonspecifically) indefinite. This distinction is detectable in ambiguous constructions, the context sometimes favouring one construal over the other. For example, if the speaker of (1a) cannot see what 'he' is eating, but was just told by his/her grandfather that it is a pork chop, this example is naturally construable as including a TFR, and is paraphraseable by (11a). On the other hand, if the speaker and the grandfather had the opportunity to examine the meal prior to its being eaten by 'him', and if the grandfather, but not necessarily the speaker, thought it was a pork chop, the example is naturally construable as including an FR, and is paraphraseable by (11b). Correspondingly, the null Det in (2) is construed as a definite operator in FRs and as an indefinite/existential one in TFRs³.

- (11) a. He is eating *something* that my grandfather thinks is a pork chop.
 b. He is eating *the thing* that my grandfather thinks is a pork chop.

Thus, Grosu's view that the pivot belongs **only** in the subordinate clause was primarily motivated by a demonstration that it is exclusively interpreted there, no part of it being construed in the matrix (for illustration and discussion, see Grosu 2016, section 3.1). An additional motivation for adopting this view was the existence of certain syntactic facts that conflicted with the assumption that the pivot is syntactically present in the matrix (for details, see Grosu 2003, sections 5.4 and 5.5, or Grosu 2016, pp. 1252-3). With respect to the syntactic effects that are consistent with the view that the pivot is present in the matrix, and may in fact be used as supporting arguments for that view, Grosu (2016) proposed that *what* in TFRs, unlike *what* in FRs and interrogatives, is unspecified for category, syntactic number and non-human status. He further proposed that this under-specification enables *what* to 'inherit' certain properties from the pivot, regardless of whether the copular structure or small clause is construed equationally or predicatively, and that this state of affairs gives rise to what may be called a 'transparency channel', through which properties of the pivot may be 'conveyed' to the TFR, and conversely⁴. See Grosu (2016 pp. 1258-9) for more detailed discussion of these matters.

We conclude this section with two important remarks.

The first is that from the perspective of Grosu's (2016) characterization of TFRs, parenthetical constructions like (5b) are **not TFRs at all** *on the construal that involves the interpretation of the 'pivot' at matrix indices*. On the construal where the uttering of the pivot is delayed for suspension effects, the pivot is interpreted at the indices of the relative clause (as brought out by the fact that data like (9a-b) are possible), and the construction is a *bona fide* TFR.

³ This is an oversimplification of the semantic analysis in Grosu (2016), which, however, will do for present purposes. In Grosu (2016), it is proposed that the relative CP denotes a set of **individual concepts** (of type <s,e>), and that the **value** of the complex DP at matrix indices may be indefinite/indeterminate, even if the Det that takes CP as argument is definite, with the result that the intensional object denoted by the complex DP is unique. In such a case, indeterminacy results from the possibility that the values of that intensional object may vary across the speaker's belief-worlds.

⁴ The latter possibility is needed for handling pre-nominal adjectival TFRs; see section 3.

The second is that from the perspective of van Riemsdijk's theory, data like (6)-(7) can only be handled, as far as we can see, by admitting that the pivot, even if syntactically present in the matrix, cannot be interpreted there, at least, not in general (see Grosu 2016, section 6, for elaboration of this point).

3 Pre-Nominal Adjectival TFRs

We now turn to a consideration of adjectival TFRs, which, like APs in general, may occur either in predicative or in ad-nominal position, as in (12)-(13) respectively.

(12) This story is [what many people might consider **highly intriguing**].

- (13) a. ?Bill proposed a [_{AP} what my sister would call/view as **interesting**] solution.
 b. Bill proposed a [_{AP} new and what my sister would call/view as **interesting**] solution.

We note that some speakers view data like (13a), in which the TFR immediately follows a determiner, as somewhat marginal, but are more ready to accept data like (13b), where the TFR is coordinated with a preceding lexical adjective.

A fact of some importance, which was not explicitly pointed out by Grosu (2016), is that adjectival TFRs yield essentially the same kind of semantic support for Grosu's theory as the data that were brought up in section 2. Thus, adjectival TFRs are infelicitous if the relative includes no obvious explicit or implicit intensional operator (see the (a) sub-cases of (14)-(15)), are compatible with situations in which the speaker subscribes to the content of the pivot (see the (b) sub-cases of (14)-(15)), and are also compatible with situations in which the speaker decidedly rejects the content of the pivot (see the (c) sub-cases of (14)-(15)). Furthermore, data like (15c) are not an idiosyncratic property of English; they are also found, for example, in French and Romanian, as illustrated by the (b) sub-cases of (16)-(17).

- (14) a. #This story is [what is **interesting**].
 b. This story is [what I might call **interesting**].
 c. This story is [what no one in his right mind would ever call **interesting**].

- (15) a. #Bill proposed a [(new and) what is interesting] solution.
 b. Bill proposed a [(new and) what I might call **intriguing**] solution.
 c. Bill proposed a [(crazy and) what no one would ever call **interesting**] solution.

- (16) a. Jean a fait une (nouvelle et) ce que j'appellerais **très intéressante** proposition.
 Jean has made a new and Dem that I-would call very interesting proposal
 'Jean has made a new and what I would call very interesting proposal.'
 b. Jean a fait une (stupide et) ce que personne n'appellerait **intéressante** proposition.
 Jean has made a stupid and Dem that nobody Neg-would-call interesting proposal
 'Jean has made a stupid and what no one would call interesting proposal.'

- (17) a. Ion a prezentat o (nouă și) ceeace aș numi **extrem de interesantă** soluție.
 Ion has presented a new and Dem-that I-would call extreme of interesting solution
 'Ion presented a new and what I would call extremely interesting proposal.'
- b. Ion a prezentat o (veche și) ceeace nimeni n-ar considera **interesantă** soluție.
 Ion has presented an old and Dem-that nobody Neg-would consider interesting solution
 'Ion presented and what no one would consider interesting proposal.'

The importance of data like (14)-(17) lies in the fact that they broaden the empirical data-base of Grosu's thesis, which holds that the pivot needs to be interpreted in the relative. In particular, they show that the pivot must be so interpreted not only in nominal, but in adjectival TFRs as well.

Having established that much, we now propose to address a type of data that has been widely viewed as providing especially strong support for van Riemsdijk's approach to TFRs, but which, upon closer consideration, turns out to create a hitherto unnoticed problem for it. In a number of studies, van Riemsdijk discusses the implications of a kind of example that constitutes the Dutch counterpart of (15b), and is illustrated in (18a); for completeness, we provide an analogous German example in (18b). Much as with respect to the English data in (13), some speakers of Dutch and German find data like (18) easier to accept if the TFR is preceded by a conjoined adjective, but in order to avoid unintended complexities, we confine our discussion to data as in (18).

- (18) a. Bill ontdekte een wat ik zou noemen **eenvoudig-e** oplossing.
 Bill discovered a what I would call simple-Agr solution.
 'Bill discovered a what I would call simple solution.'
- b. Bill entdeckte eine was ich nennen würde **einfach-e** Lösung⁵.
 Bill discovered a what I call would simple-Agr solution.
 'Bill discovered a what I would call simple solution.'

Before discussing the facts that provide strong (at least *prima facie*) support for the grafting approach, we wish to point out certain additional facts, with a view to avoiding possible confusion. Thus, note that the import of (18b) can also be expressed with the essentially synonymous constructions in (19).

- (19) a. Bill entdeckte eine [_{NP} was ich **einfach-e Lösung** nennen würde].
 Bill discovered a what I simple-Agr solution name would
- b. Bill entdeckte [_{DP} was ich **eine einfach-e Lösung** nennen würde].
 Bill discovered what I a simple-Agr solution name would

These data are syntactically different in the following way: While the pivot in (18b), and correspondingly the TFR, are adjectival, the pivots (and the TFRs) in (19a-b) are NPs and DPs respectively. Furthermore, the pivot is differently ordered with respect to the subordinate verb, a matter of importance, as will be seen below. In sum, our principal reason for bringing up the data

⁵ In Grosu (2016), this example was starred. We are grateful to Klaus von Heusinger for pointing out to Alex Grosu that it is acceptable, at least, with a parenthetical intonation.

in (19) is to make clear that such data, although synonymous with (18b), are not directly relevant to the point that will now be discussed.

We now turn to the presentation of a number of grammatical facts which, taken together, provide strong *prima facie* support for the view that the pivot in data like (18) needs to (also) be syntactically realized in the matrix.

(i) First, Dutch and German, as well as a number of other languages that include English, French and Romanian, are subject to the so called Head Final Filter (HFF; Williams 1982), which requires that a pre-nominal AP modifier end with its A head. This condition is straightforwardly fulfilled in (18) if the boldfaced adjective is a matrix sister of the following noun, but appears to be violated if the adjective is assumed to be relative-internal. This problem is not specific to Dutch and German data like (18), it also arises with respect to English, French and Romanian data like those in (15)-(17). The conjunction of the next three properties, however, is specific to Dutch and German.

(ii) A second relevant fact is that in Dutch and German, unlike in English, the head of an AP which modifies a noun must exhibit morphological agreement with the noun (with few exceptions in Dutch, which need not concern us here). Note that in (18), the pivot agrees with the ensuing noun, and this is straightforwardly accounted for if the pivot is the (quasi-)head of the TFR, but unexpected if it is not.

(iii) A third relevant fact is that in Dutch and German, an AP internal to a subordinate clause may not follow that clause's verb, as illustrated in (20b)-(21b); additional illustration is provided in (22)-(23). Now, in (18), the pivot follows the subordinate verb. This is unproblematic if the pivot is assumed to be in the matrix, but unexpected if it is assumed to be in the relative.

(20) a. Jan vraagt zich af [wie_k Marie [t_k **eenvoudig**] noemt].

Jan asks self off who Marie simple calls
'Jan wonders who Marie calls simple.'

b. *Jan vraagt zich af [wie_k Marie noemt [t_k **eenvoudig**]].

(21) a. Hans fragt sich, [wen Maria dumm nennt].

Hans asks himself who Maria stupid calls
'Hans wonders who Mary calls stupid'

b. *Hans fragt sich, [wen Maria nennt dumm].

(22) a. Deze oplossing zou ik interessant noemen.

this solution would I interesting call
'This solution, I would call interesting'

b. *Deze oplossing zou ik noemen interessant.

(23) a. Diese Lösung würde ich interessant nennen.

this solution would I interesting call
'This solution, I would call interesting'

b. *Diese Lösung würde ich nennen interessant.

(iv) A fourth relevant fact is that in Dutch and German, adjectives must agree with the modified noun when they are in adnominal position, but must not agree with the subject of a copular sentence or small clause when they serve as predicate of that sentence/small clause. Now, if the boldfaced adjective in (18a-b) is in the relative clause, it is the predicate of a small clause selected by *noemen/nennen*, and the fact that it bears agreement morphology is unexpected. On the other hand, if it is grafted from the (small clause within the) relative clause unto the matrix, the resulting structure has the properties schematically indicated in (24).

- (24) [_{Matrix Clause} Bill ontdekte een **eenvoudig**-e oplossing
 Bill detected a simple-AGR solution
 [_{CP} wat_k ik zou [_{SC} tk **eenvoudig**] noemen]
 what I would simple call

The two clauses are joined only by the **adjectival root**, which is shared by the relative and the matrix (in keeping with the schema in (3)). The realization of the pivot in the matrix is adnominal, and can serve as basis for the attachment of an agreement affix, as well as for satisfaction of the HFF; the realization of the pivot in the relative is in predicate position, and thus requires no agreement morphology. Furthermore, the (unpronounced) realization of the pivot in the relative may be assumed to precede the subordinate verb, in keeping with requirement (iii) (see (20)). In this way, all four requirements listed above appear to be satisfied under the grafting approach, but seem to be violated under the alternative approach proposed by Grosu (2016).

Before accepting this conclusion, however, it is necessary to check the following prediction made by the analysis in (24) with respect to (18a-b): In view of the fact that English, French and Romanian allow not only constructions in which the speaker subscribes to the content of the pivot, as in (15b), (16a) and (17a), but also constructions in which the speaker disagrees with the content of the pivot, as in (15c), (16b) and (17b), it is expected that Dutch and German, which allow constructions of the former kind, as was seen in relation to (18), should also allow constructions of the latter kind, as in (25).

- (25) a. Hij heeft een wat ik niet bepaald zou noemen **interessant**-e theorie voorgesteld.
 he has a what I not exactly would call interesting-AGR theory proposed
 ‘He proposed a what I would not exactly call interesting theory’
 b. Er hat eine was ich nie nennen würde **einfach**-e Lösung vorgeschlagen.
 he has a what I never call would interesting-AGR solution proposed
 ‘He proposed a what I would never call interesting theory’

We submitted the Dutch data in (18a) and (25a) to the evaluation of eight linguistically sophisticated native consultants, and the German data in (18b) and (25b), to seventeen comparably sophisticated native consultants. The consultants were asked to compare the relative acceptability of (18) vs. (25), and the German consultants were also asked to compare (18b) and (25b) pronounced with a continuous vs. a parenthetical intonation, so that (18b) and (25b) got compared with (26a-b) respectively.

- (26) a. Bill entdeckte eine, was ich nennen würde, einfach-e Lösung.
 Bill detected a what I call would simple-AGR solution
 ‘Bill found a, what I would call, simple solution.’
- b. Bill entdeckte eine, was ich nie nennen würde, einfach-e Lösung.
 Bill detected a what I never call would simple-AGR solution
 ‘Bill found a, what I would never call, simple solution.’

The following results were obtained:

[A] With respect to (18) and (25) without a parenthetical intonation, our consultants overwhelmingly rated the latter worse than the former (7 of the Dutch, and 15 of the German consultants⁶). Only one Dutch and two German consultants found both types of data OK.

[B] With respect to (18b) vs. (26a), 13 consultants preferred (26a), one consultant expressed no preference, and 3 consultants preferred (18b).

[C] With respect to (25b) vs. (26b), 10 consultants preferred (26b), one consultant preferred (25b), and 6 rejected both.

What do the results [A]-[C] imply for the two competing theories, given the requirements [i]-[iv] noted earlier?

For the grafting approach, [A] constitutes a problem, because the analysis in (24) predicts that both types of data should be OK, [i]-[iv] being satisfied in both. – [B] is compatible with this approach. The preference for a parenthetical intonation manifested by most German consultants may be attributed to the fact that it makes the construal of the pivot in the matrix more salient. – Concerning [C], we do not see how the approach under consideration can shed light on the preference of most consultants for the parenthetical intonation.

For the theory in Grosu (2016), [A] is accounted for rather straightforwardly: Since the pivot needs to be construed in the relative clause, it is an incontrovertible TFR, and the pivot must thus be also syntactically present in the relative only. This state of affairs violates the word-order requirement [iii], illustrated in the (b) sub-cases of (20)-(23), with resulting degradation. [C] can also be accounted for: the intonational separation of the pivot from the subordinate verb plausibly ‘masks’, or renders more tolerable, the violation of requirement [iii]. This suggestion receives independent support from the observation that Dutch and German typically disallow DPs after a subordinate verb, but nonetheless allow this state of affairs when the post-verbal DP is sufficient long and heavy to induce intonational separation from the verb (see Grosu 2003, examples (11)-(13))⁷. As for [B], if parenthetical intonation favours the construal of the pivot in

⁶ Klaus von Heusinger pointed out to us that (25b) can be rendered acceptable by replacing *nennen* with *sagen* in it, as in (i).

(i) Er hat eine was ich nie sagen würde einfach-e Lösung vorgeschlagen.

This example is differently structured: while *nennen* selects the small clause [*t einfach*], *sagen* selects a nominal direct object that seems to have quotational status, “*einfache Lösung*”. If so, (i) does not cast doubt on the unacceptability of (25b).

⁷ For convenience, we reproduce Grosu's example (13) as (i) below:

(i) Der Hans will der Maria zurückgeben – dieses Buch, diese Platte und diese Kleider.
 the Hans wants the.Dat Maria return this book this record and these clothes
 ‘Hans wants to return to Maria this book, this record and these clothes.’

the matrix, as suggested in the preceding paragraph, the theory need not say anything about the constructions at issue, since as far as it is concerned, these constructions are not TFRs.

It remains to show how Grosu's theory can deal with the judgments of those consultants who found (25a-b) and/or (26b) acceptable, given the requirements (i)-(iv). A first thing to note is that we have so far discussed the requirements (i)-(iv) as if they all had the same status. But it is well known from other domains of study that the relative strength of conflicting requirements may vary from language to language, and sometimes from speaker to speaker, resulting in situations where a construction is acceptable even if it violates a requirement felt to be 'weaker', so long as it satisfies a 'stronger' one (this state of affairs is in fact the primary factor responsible for Optimality Theories). There is independent evidence that the agreement requirement is sometimes stronger than the HFF. For example, the English example in (27) is felt to be at best marginal, due to a violation of the HFF (note that the AP ends with an adjective that is not its head). In contrast, the Dutch and German constructions in (28) are felt to be basically OK, due to the fact that the non-head AP-final adjective bears agreement morphology. The strength of the agreement requirement is also reflected in data like (29), where agreement in AP-final position improves acceptability, even when realized on an AP-final **non-adjective**.⁸

(27) ??Mary is looking for an as fast as possible car.

(28) a. Een zo snel als moegelik-e auto ...

a so fast as possible-Agr car

'As fast a car as possible.'

b. Ich bitte um die [so schnell wie Ihnen *möglich-e*] Beantwortung meines Briefes.

I ask for the as fast as you-Dat possible-Agr reply my letter-Gen

'I request a reply as prompt as possible to my letter.'

(29) a. *Nimm ein [stark-es genug] Seil!

take a strong-Agr enough rope

b. ?Nimm ein [stark genug-es] Seil!

take a strong enough-Agr rope

'Take a strong enough rope!'

We conjecture that for speakers who find data like (25a-b) OK or marginally possible, satisfaction of (ii), i.e., the agreement requirement, is strong enough to 'mask' the non-satisfaction of (i), (iii) and (iv), i.e., of the HFF, of the word-order requirement, and of the ban on agreement morphology on a predicative adjective. As for the mechanism due to which the pivot of an adjectival TFR receives phi-features from the noun modified by the adjectival TFR, Grosu (2016, p. 1261) suggests that the transparency channel used for accounting for matching effects in category and syntactic number (see section 2) can be exploited in the converse direction to ensure agreement, as alluded to in footnote 4. This mechanism can, of course, be used to analyze adjectival TFRs in any language that requires adnominal adjectives to agree with modified nouns, whether predicative adjectives get inflected or not.

In order to further check our assumption that what makes (25) unacceptable for a significant number of speakers is the violation of a word order requirement, we proceeded to test comparable data in a language in which the agreement requirements are just as in Dutch or

⁸ For the original discussion of these data in Dutch see van Riemsdijk (1998).

German, but the basic word order in subordinate clauses is VO, not OV. Such a language is Yiddish, and we elicited the data in (30) and (31) from two distinct consultants, who are also native speakers of English and French respectively. Their evaluation of these data was that they have precisely the acceptability of the corresponding data in English and French. This shows that when they are not 'masked' by word order considerations, the relevant data work as predicted by Grosu's transparency-channel mechanism.

- (30) a. Bil hot forgeshlogen a (nay-em un) vos ikn volt gerufen **poshet-n** plan.
 Bill has proposed a new-Agr and what I would call simple-Agr plan
- b. Bil hot forgeshlogen a (nay-em un) vos keyner volt nisht gerufen **poshet-n** plan.
 Bill has proposed a new-Agr and what nobody would Neg call simple-Agr plan
- (31) a. koydemkol vil ikh zogen az
 first-of-all, want I say that
 in meshekh fun di fargangene khadoshim, hobn mir dergreykht
 in the course of the past months, have we achieved
 alts interesantere rezultatn: nor nekhtn, iz bil sofklsof geven mesugl
 increasingly interesting results: only yesterday, was Bill at last in a position
 fortsushlogn a [vos me volt gekent afile rufn **posheter-e**] farentferung
 to propose a what one would be-able even call simpler solution
 'I first want to say that in the course of last few months, we have achieved increasingly
 interesting results: Yesterday only, Bill was at last in a position to propose a what one
 could even call simpler solution.'
- b. koydemkol vil ikh zogen az
 first-of-all, want I say that
 in meshekh fun di fargangene khadoshim, zeynen mir tsum tsar nisht
 in the course of the past months, were we unfortunately not
 geven mesugl tsu dergreykhen
 capable to reach
 keyn vertike rezultatn: nor nekhtn, hot bil nokh a mol forgeshlogn
 no valuable results: only yesterday, has Bill once more proposed
 a [(farkrimte un) vos keyner bam fulen zinen volt nisht gekent rufn **kreativ-e**]
 a [(screwy and) what no one in his right mind would not be-able call creative]
 farentferung
 solution
 'First of all, I want to say that in the course of the last months, we have
 unfortunately been unable to reach any interesting results: Yesterday only,
 Bill proposed once more a (screwy and) what no one in his right mind could
 call creative solution.'

4 Summary of Results

In Grosu (2016, section 7), a number of conclusions were reached concerning the relative (de)merits of the two compared theories of TFRs. What has been shown in this paper points to the following additional conclusion: the grafting theory of van Riemsdijk faces problems in connection with the analysis of pre-nominal adjectival TFRs that the theory in Grosu (2016) can avoid.

Acknowledgments

The authors wish to express their gratitude to the audience at IATL 34, for comments made during and after the discussion section, and most especially to Klaus von Heusinger, without whose penetrating remark, noted in footnote 5, this paper would never have been written. We also wish to thank Daniel Birnbaum and Jean Lowenstamm for kindly constructing the data in (30) and (31) respectively. Finally, thanks are due to the numerous Dutch and German consultants who kindly and promptly evaluated the data we submitted to them, as well as to Radek Simik, who enabled us to contact some of them.

References

- den Dikken, Marcel. 2005. Transparent, free . . . and polarized: The (poli)tics of polarity in transparent free relatives. In *Organizing grammar. Linguistic studies in honor of Henk van Riemsdijk*, eds. Norvert Corver, Riny Huybregts, Ursula Kleinhenz, and Jan Koster. Berlin: de Gruyter.
- Grosu, Alexander. 2003. A unified theory of ‘standard’ and ‘transparent’ free relatives. *Natural Language and Linguistic Theory* 21, 247–331.
- Grosu, Alexander. 2010. On the pre-theoretical notion phrasal head: Ignoring the left periphery is always at your own risk. In Anna-Maria Di Sciullo and Virginia Hill (eds.), *Edges, Heads and Projections. Interface Properties*. 151–190. Amsterdam: John Benjamins.
- Grosu, Alexander. 2014. Transparent Free Relatives. Two challenges for the Grafting approach. In Anna Bondaruk, Grete Dalmi & Alexander Grosu (eds.), *Advances in the Syntax of DPs*, 295 – 317. Amsterdam: John Benjamins.
- Grosu, Alexander. 2016. The semantics, syntax, and morphology of Transparent Free Relatives revisited; a comparison of two approaches. *Natural Language and Linguistic Theory* 34, 1245-1280.
- Kajita, Masaru. 1977. Towards a dynamic model of syntax. *Studies in English Linguistics* 5: 44-66.
- McCawley, James D. 1998. *The major syntactic phenomena of English*. Chicago University Press.
- Nakau, Minoru. 1971. The grammar of the pseudo-free relative pronoun *what*. *English Linguistics* 6, 2–47. Kaitakusha, Tokyo.
- Riemsdijk, Henk van. 1998a. Trees and scions, science and trees, *Chomsky 70th Birthday Celebration Fest Webpage*.
- Riemsdijk, Henk van. 1998b. Head movement and adjacency. *Natural Language and Linguistic Theory* 16. 633-678.
- Riemsdijk, Henk van. 2000. Free relatives inside out: Transparent free relatives as grafts. In Rozwadowska, Bożena (ed.) *Polish Association for the Study of English (PASE) 8*. Wrocław Press.

- Riemsdijk, Henk van. 2001. A far from simple matter: Syntactic reflexes of syntax-pragmatics misalignments. In István Kenesei and Robert M. Harnish (eds.) *Semantics, pragmatics and discourse. Perspectives and connections. A Festschrift for Ferenc Kiefer*. 21–41. Amsterdam: John Benjamins.
- Riemsdijk, Henk van. 2006a. Grafts follow from Merge. In Mara Frascarelli (ed.) *Phases of interpretation*. 17–44. Berlin: Mouton de Gruyter.
- Riemsdijk, Henk van. 2006b. Free Relatives. In Martin Everaert, Henk van Riemsdijk, Rob Goedemans and Bart Hollebrandse (eds), *The Blackwell Companion to Syntax*. 338–382. Oxford: Blackwell.
- Riemsdijk, Henk van. 2012. Discerning default datives: some properties of the dative case in German. In Günther Grewendorf, and Ede T. Zimmermann (eds.), *Discourse and Grammar*. 247–287. Berlin: Mouton de Gruyter.
- Riemsdijk, Henk van. 2017. Free Relatives. In *The Wiley Blackwell Companion to Syntax, Second Edition* (eds: M. Everaert and H. C. Riemsdijk), Volume III, 1665-1710.
- Schelfhout, Carla, Peter-Arno Coppen and Nelleke Oostdijk. 2004. Transparent free relatives. In Sylvia Blaho, Luis Vicente and Mark de Vos (eds.), *Conference of the Student Organization of Linguistics in Europe (ConSOLE) XII* (2003, Patras). Published on-line in 2004, ISSN: 1574-499X.
- Schütze, Carson T. and Richard Stockwell. 2019. Transparent Free Relatives with *Who*: Support for a Unified Analysis. To appear in *Proceedings of the Linguistic Society of America 2019*.
- Smet, Hendrik de and Freek van de Velde. 2013. Serving two masters: Form-function friction in syntactic amalgams. *Studies in Language* 37(3), 534–565.
- Velde, Freek van de. 2011. Left-peripheral expansion of the English NP. *English Language and Linguistics* 15(2), 387–415.
- Wilder, Christopher. 1998. Transparent free relatives. *ZAS Papers in Linguistics* 10, 191–199. Berlin: Zentrum für Allgemeine Sprachwissenschaft.
- Williams, Edwin. 1982. Another argument that passive is transformational. *Linguistic Inquiry* 13. 160-163.
- Yoo, Eun-Jung. 2008. Transparent Free Relatives in English. In Stefan Müller (ed.): *Proceedings of the 15th International Conference on Head-Driven Phrase Structure Grammar*, National Institute of Information and Communications Technology, Keyhanna. 294-304. Stanford, CA: CSLI Publications.

Alexander Grosu
 Department of Linguistics
 Tel Aviv University
 Tel Aviv 69978, Israel
grosua@post.tau.ac.il

Josef Bayer
 Department of Linguistics
 Universität Konstanz
 78457 Konstanz, Germany
josef.bayer@uni-konstanz.de