

# Free Adjunct Free Relatives

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## 1. Introduction

Free relatives have been studied as clause-internal arguments or adjuncts (cf. Bresnan and Grimshaw 1978, Groos and van Riemsdijk 1979; Grosu 1994, 1996, Larson 1987, Jacobson 1995, Grosu and Landman 1998, a.o.); and as correlatives linked to clause-internal positions via proforms (cf. Andrews 1985, Dayal 1996, a.o.). In both these cases, free relatives have the syntactic behavior and interpretation of subclausal phrases - DPs, AdjPs, or AdvPs. Thus, a category-changing CP-external projection - a DP, AdjP or an AdvP - has been posited in all free relatives. This paper argues, however, that in some cases, free relatives should be ascribed the syntax of bare CPs as well as propositional semantics. In particular, this is the case for free relatives functioning as FREE ADJUNCTS. Free adjuncts are sentence-level adverbials which do not have an overt logical connective linking them to the main clause. As an example of a free adjunct free relative, consider (1):

(1) Whatever John cooks, he will win the cooking contest.

A number of syntactic and semantic issues raised by free adjunct free relatives are identified here.

First, there are restrictions on the type of free relatives that can appear as free adjuncts. Free relatives that have overt heads, e.g., the *lo que* free relatives in Spanish, are prohibited. Free relatives without overt heads are not all possible either: the presence of an *ever*-type particle or negation in the free relative is necessary. Furthermore, the free relatives allowed as free adjuncts fall into subgroups, depending on the type of their *wh*-pronoun. Those free relatives that have special, i.e., non-interrogative, *wh*-words (e.g., Bulgarian, Greek, Spanish), require the subjunctive mood, whereas free relatives formed through interrogative syntax (e.g., English, Polish, Hebrew, some free relatives in Bulgarian and Greek) may appear in the indicative. The study of free adjunct free relatives thus highlights the structural differences that exist among types of free relatives, within languages and crosslinguistically.

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Second, the availability of free relatives as free adjuncts challenges the accepted wisdom that free relatives have the external syntax of subclausal phrases, i.e., that nominal free relatives are DPs, free relatives with adjectival *wh*-pronouns are AdjPs, etc. In general, DPs and AdjPs cannot appear as free adjuncts. This suggests the necessity of a new analysis of free relatives - at least of those free relatives that are allowed as free adjuncts in the first place.

Third, free adjunct free relatives receive a very specific interpretation. They evoke conditions, irrespective of which the truth of the proposition expressed by the main clause obtains. Such a semantic role is known as CONCESSION. Importantly, the concessive interpretation is present in the absence of an overt concessive expression such as *although* or *even if*. The question arises of how to derive the particular meaning in a compositional and principled way.

In sum, this paper offers an analysis of the structural properties that allow certain free relatives to appear as free adjuncts and of how these structural elements combine to trigger the concessive interpretation.

## 2. Free Adjuncts and Free Relatives

Whereas sentential adjuncts are normally introduced by a complementizer (e.g., *because*, *if*, *since*, etc.) which determines their semantic relationship with the main clause, free adjuncts are sentence-level adverbial clauses without an overt logical connective (cf. Visser 1972, Quirk et al. 1985, Krusinga and Erades 1953, see also Stump 1985).<sup>2</sup> Some examples are given in (2):

- (2) a. *No further discussion arising*, the meeting was brought to a close. (Quirk et al. 1985 p. 1120)  
 b. *Unable to meet his eyes*, Kate looks down at her hands. (Stump 1985, p.4)

Free adjuncts express a proposition (here and after *q*) that is semantically subordinate to the proposition expressed by the main clause (here and after *p*). For instance, (2a) is interpreted as something like *Given that* [<sub>*q*</sub> *no further discussion arose*] [<sub>*p*</sub> *the meeting was brought to a close*]. In this respect, free adjuncts function similarly to a class of adverbial clauses known as ADVERBS OF CONTINGENCY in traditional grammar (cf. Quirk 1985). These include conditionals (e.g., *if q, p*), resultatives (e.g., *p, so q*), causatives (e.g., *because q, p*), exceptives (e.g., *p, except (that) q*), purpose clauses (e.g., *p, so that q*), and concessives (e.g., *although q, p*). All these adverbial clauses,

<sup>2</sup>The term ABSOLUTE is also used, usually as a cover term for all CP-adverbials that have no overt link to the main clause. Sometimes it refers specifically to a subset of such constructions - those with an overt subject, as in (2a), while the term FREE ADJUNCT is kept for sentential adverbials without an overt subject, as in (2b) (cf. Krusinga and Erades 1953, Stump 1985).

however, are introduced by overt connectives which determine the semantic relationship between main and subordinate proposition. In free adjuncts this relationship is not overtly specified. The semantic role of free adjuncts is variable, and has sometimes been assumed to be entirely pragmatically determined. Stump (1985) has showed that the semantic variability of free adjuncts is in fact grammatically constrained, although still dependent on context to some extent. Thus, a free adjunct such as the one in (3a) is assigned by the grammar a conjunctive interpretation, as in (3b):

- (3) a. Working hard, I finished at 8.  
 b. I worked hard & I finished at 8

From then on, the interpretation may vary. Normally, a causative meaning is inferred, i.e., *Because I worked hard, I finished at 8* but a concessive interpretation may also be available, i.e., *Although I worked hard I (still) finished at 8*, given the right context.

Free relatives do not have this variability, however; they are always interpreted as concessives. Compare the interpretation of (4) with that of (3). Finishing at 8 in (4) can only be interpreted as non-desirable.

- (4) However hard I worked, I finished at 8.

The accepted wisdom from traditional grammar is that a concessive is a reversed conditional “indicating circumstances in which a result would ensue irrespective of the content of the concessive clause” (Quirk 1985, p. 644). Thus, whereas *if q, p* asserts the truth of *p* in case of *q*; CONCESSIVE *q, p* asserts *p* unconditionally, specifically indicating that the truth of *q* does not affect the truth of *p*. Concessives indeed have conditional presuppositions, in the sense that normally,  $\neg p$  is true in case *q* is true. Thus, in our example in (4), it is presupposed that normally, if I work hard, I do not finish at 8 (i.e., late).

Now that we have an understanding of what the range of interpretations associated with concessives in general is, we can turn to the meanings available to free adjunct free relatives. As is the case with other concessives, the truth of the proposition *p* expressed by the main clause is always asserted. It is not clear how to talk about the proposition *q* in the context of concessive free relatives, however. Free relatives are standardly taken to be nominals denoting either entities (of type *e*), or generalized quantifiers (of type  $\langle\langle e, t \rangle, e \rangle$ ). As I will argue later, the phenomenon of free adjunct free relatives suggests that we should reconsider what a free relative can denote. For now, intuitively, concessives that involve free adjunct free relatives are interpreted as an exhaustive conjunction of conditionals, as in (5):

- (5) Whatever John cooks, he will win the cooking contest.

- a. If John cooks  $x_1$ , he will win the cooking contest, &
- b. If John cooks  $x_2$ , he will win the cooking contest, & ... &
- c. If John cooks  $x_n$ , he will win the cooking contest

The concessive reading, associated with free adjunct free relatives is similar to the one in concessive conditionals. No (individual)  $q$  is presupposed to be true.

### 3. Crosslinguistic Considerations

The syntax of free relatives varies across languages, and even within the same language several types of free relatives may exist. A study of the free relatives available as free adjuncts - based on English, German, Polish, Russian, Spanish, Catalan, Greek, Bulgarian, and Hebrew - reveals a meaningful pattern. The following generalizations can be made (and will be accounted for in section 4):

- (6) a. *FR External Syntax*:  
Free relatives with CP-external heads cannot appear as free adjuncts
- b. *FR Internal Syntax*:
  - (i) Free relatives formed with a question *wh*-word need a focus particle or negation to appear as free adjuncts
  - (ii) Free relatives formed with a *wh*-word distinct from the question *wh*-word need the subjunctive mood to appear as free adjuncts in addition to a focus particle

Let us illustrate the above generalizations. Spanish and Catalan *lo/el que* 'the that', Bulgarian *tova koeto* 'this which', and Greek *afto pu* 'this that' free relatives have a CP external head - *lo/el/tova/afto*, respectively. These free relatives are ruled out as free adjuncts (as indicated in (6a)). Consider the representative Spanish (7):

- (7) \*Lo que diga Juan, Maria dejara el trabajo  
DET that says-SUBJ Juan, Maria quit-FUT the job  
'Whatever Juan says, Maria will quit her job.'

Importantly, it is not the absence of an *-ever*-type reading that rules out these free relatives. In the subjunctive mood, *lo que* free relatives have the free-choice reading of English *whatever* free relatives (Quer 1998, p. 188).

In addition to the prohibition against CP external material, free adjunct free relatives may not be of the *ever*-less kind (in accordance with (6b,i)). Consider the case of Polish in (8) as an illustration. The plain *wh*- counterpart of the English (1) is also unacceptable, as the reader can verify; similarly,

in German an additive particle *auch* ‘as well’ is necessary to license a free adjunct role for the free relative.<sup>3</sup>

- (8) Co\*(*kolwiek*) ty zrobisz Jan nie dostanie pracy.  
 what<sub>Q</sub>-ever you do Jan not get job  
 ‘Whatever you do, Jan will not get the job.’

The other option according to (6b,i), that of negation licensing the free adjunct role for the free relative, is illustrated by the Hebrew example in (9). Negation is (seemingly) uninterpreted but its presence is required. Similar facts obtain in Russian and in some free relatives in Polish (see Citko 2000 for discussion and examples), as well as in those free relatives in Bulgarian and Greek which are formed with an interrogative *wh*-pronoun. It appears to be the case that negation can license a free adjunct role only for free relatives formed with an interrogative *wh*-word.

- (9) ma she-Dan \*(lo) ’asa, hi himshixa li-x’os ’alav  
 what<sub>Q</sub> that-Dan not did she continued to-be-angry at-him  
 ‘Whatever Dan did, she continued to be angry at him.’

Finally, in conformity with (6b,ii), free relatives in Bulgarian, Greek and Spanish formed with non-interrogative pronouns require the subjunctive mood to appear as free adjuncts. In the case of Bulgarian and Greek, the free relative pronoun is decomposable to an interrogative *wh*-pronoun plus a definite element (cf. the Bulgarian example in (10)). In Spanish, the relevant *quienquiera* class of free relatives (see Quer 1998 for discussion and examples) arose as the result of reanalysis of a relative clause headed by a relative pronoun (Rivero 1991). The mood choice is thus linked to the type of *wh*-word, but the subjunctive alone cannot license the free adjunct role. In all three languages the presence of a focus particle is required as well, i.e., an additive particle ‘also’ in Bulgarian (cf. (10)) and Greek, and *-quiera* in Spanish.

- (10) Kakvo-to i da kaža toj veče e vzal rešenje.  
 what-DEF also SUBJ say-1SG he already be-3SG taken decision  
 ‘Whatever I say, he has already made his decision.’

In summary, the crosslinguistic facts fall together in a systematic way. In none of the languages that have independently well-formed free relatives with CP-external heads can these free relatives function as free adjuncts.

<sup>3</sup>Optionally, *immer* ‘ever’ may appear as well in German. For some speakers *immer* alone is possible in free adjunct free relatives, in case the *wh*-pronoun is not part of a larger pied-piped phrase.

Either interrogative syntax or the subjunctive mood is necessary to license the free adjunct role. Neither of these is sufficient, though. A focus particle is also necessary, or, if an interrogative *wh*-pronoun introduces the free relative, negation may license the free adjunct role. The next section provides an explanation for the crosslinguistic generalizations.

## 4. The Analysis

### 4.1. Concessive Free Relatives Are Bare CPs

Free relatives have undeniably the internal syntax of clauses. I propose that free adjunct free relatives are maximally CPs, i.e., there is no further syntactic structure that is merged with the CP projection to turn the free relative into a phrase - a DP, an AdjP, or an AdvP. This runs against what is commonly believed to be the structure of free relatives. Proponents of both the HEAD-analysis (cf. Bresnan and Grimshaw 1978, Larson 1987, 1998) and of the COMP-analysis (cf. Groos and von Riemsdijk 1979, Suñer 1983, Harbert 1983, Grosu and Landman 1998, among others) assume that there is a syntactic layer above the clausal level; where these analyses differ is in whether the head is posited to be the *wh*-phrase or a phonologically non-overt form.

This phrasal analysis of free relatives, however, is problematic, because normally, DPs and other sub-clausal categories such as AdjPs do not appear as sentential adjuncts. Even when the semantic content of the main clause and the DP adjunct favor a concessive interpretation, the sentences are unacceptable (cf. (11)):<sup>4</sup>

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<sup>4</sup>On the surface, examples like the following appear to involve projections smaller than a clause, a DP in (ia,b) and an AdjP in (id). These, however, have clausal structures, perhaps a small clause with a PRO subject. Note that the DP in the clausal adjunct position must be predicative. Neither referential (deictic demonstratives or proper names) nor quantificational DPs are allowed in this environment, as shown by the ungrammatical sentences in (ia), (ic), and (ib), respectively.

- (i) a. {A/\*that} promising young composer, Jon was the pride of his family.
- b. {The best/\*most} students in their class, they easily won the scholarship.
- c. \*Superman, Clark Kent will prevent the disaster.
- d. Sick with the flu, Miriam could not attend the meeting.

Strengthening the conclusion that the DPs/AdjP in the good examples in (i) are predicates, is the fact that adding the predicative copula to the free adjunct is always possible (cf. (iia,b) vs. the reduced relative in (iic)):

- (ii) a. Being a promising young composer, Jon was the pride of his family.
- b. Being sick with the flu, Miriam could not attend the meeting.
- c. A woman (\*being) in a red dress was offering Philippe a drink.

- (11) a. \* [<sub>DP</sub> His stupidity] I (still) love him.  
 b. \* [<sub>DP</sub> His many good qualities] he (still) did not get the job.

The proposal that concessive free relatives are bare CPs has several advantages. One concerns the issue of lexical features such as case- and  $\phi$ -features that are present on nominals and require checking in the course of the derivation. The external head of nominal free relatives, whether it is an overt *wh*-pronoun or a null element, is a lexical item and as such it should bear case- and  $\phi$ -features. These case features need to be checked, just as is required in the case of any other DP. However the free relative is a CP-adjunct and thus cannot check its case- and  $\phi$ -features. Thus all nominal free relatives should be prohibited as free adjuncts.

To sum up, the above discussion suggests that apparent cases of DPs and AdjPs functioning as free adjuncts, are in fact syntactically clausal. Likely, the syntactic restriction against the appearance of DPs and AdjPs as free CP-adjuncts is linked to case/agreement requirements on DPs and AdjPs which requirements cannot be checked in a CP-adjunction structure without the recourse of ‘reconstruction’ into the clause. The non-availability of DP and AdjP free adjuncts suggests that we should reconsider the categorial status of the free relative in (1). If *whatever John cooks* was indeed a nominal projection, as commonly assumed, then it would be an exception to the apparently universal lack of DP and AdjP free adjuncts.<sup>5</sup>

The earlier discussion showed that DPs are generally restricted from occurring as free adjuncts. Cases where a predicative DP apparently appears as a sentence-level adjunct were reanalyzed as involving a non-overt functional structure, like a small clause. Could it be the case that whenever a nominal free relative appears as a free adjunct, it is actually a predicative DP in a small clause? In other words, perhaps a free relative free adjunct as in (12a) is the predicate of a null copula that can be lexicalized, as in (12b). Here the free relative would arguably be a predicative DP, functioning just like *a linguist* in *Being a linguist, Jon makes them all proud*. However note the following two facts: (i) in the absence of an overt copula the free relative cannot be

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Aspectual projections are apparently present and can in fact be instantiated in reduced relatives (cf. *one of the papers being assigned to us*), strengthening the suggestion that no syntactic position corresponding to the copula exists in (iic). This in turn supports the proposal that the good examples in (i) contain non-overt clausal structure.

<sup>5</sup>The constraints at clausal adjunction are looser in the case of Adverb Phrases. Thus, there are classes of adverbs such as *fortunately*, *amazingly* and *usually*, *possibly*, which are sentence-level adverbials, and which may appear adjoined to CP. Importantly, such adverbs function as predicates, embedding as their argument the CP to which they are adjoined. Thus, they do not play the role of semantic adjuncts, unlike free adjuncts. Therefore, there is no real counterexample to the generalization that no phrases smaller than clauses may be free adjuncts.

interpreted as a predicate anymore (cf. 12a); and (ii) in the presence of the copula the free adjunct is not interpreted as a concessive (12b).

- (12) a. Whatever his family wanted him to be, Jon makes them all proud.  
 b. Being whatever his family wanted him to be, Jon makes them all proud.

Adopting the proposal that concessive free relatives are bare CPs preserves the generalization that only clauses can be free adjuncts.

Concessive free relatives in some languages allow multiple *wh*-phrases. Bulgarian is such a language (and so are the other Slavic languages, for instance). Example (13) illustrates the availability of multiply-‘headed’ free adjunct free relatives. The availability of multiple *wh*-words in concessive free relatives favors a bare CP analysis; otherwise one would have to posit nominal structures with multiple heads.

- (13) Kojto kakvoto i da mu kaže, Ivan šte napusne rabotata si.  
 who what also SUBJ him say-3SG Ivan will quit job self  
 ‘No matter who says what to him, Ivan will quit his job.’

Finally, free relatives with CP-external structure, e.g., the free relatives headed by determiners such as the Spanish *lo*, Greek *afto*, Bulgarian *tova*, cannot function as concessive free adjuncts, as shown earlier. This supports the position that free adjunct free relatives are bare CPs.

Any DP interpretation for the free adjunct free relative - entity, predicate, or a generalized quantifier - would be impossible to compose with the main clause proposition, unless we posit a null connective and assign it the appropriate meaning. But since the phenomenon we are discussing is cross-linguistically general, positing null connectives will be un insightful. A better approach is to try to derive the concessive interpretation based solely on the semantics of free relatives. In the discussion of the meaning of concessive adjuncts above we saw that the interpretive component makes reference to a propositional meaning. A bare CP is the appropriate syntactic structure to derive a propositional meaning.

I next turn to the interpretive contribution of the various elements in the free adjunct free relative construction. My goal is to sketch a compositional analysis bringing the syntax and semantics together; I will not offer a formal semantic analysis here.

## 4.2. The Role of Interrogative Semantics

I propose that free adjunct free relatives formed with an interrogative *wh*-phrase (before the addition of *-ever*-type particles) have the basic semantics

of questions. This is the case for the English, German, and Polish free adjunct free relatives of which we saw examples earlier. Hebrew and Bulgarian free adjunct free relatives formed with an interrogative *wh*-word, a complementizer and negation, are also of this kind.<sup>6</sup>

The question denotation contributes a set of alternative propositions to interact with the other interpretive elements in the free adjunct construction. The multiplicity of propositions is a desired component of the concessive meaning. The question meaning is characterized by the set of its answers (cf. the semantics of Hamblin 1973, Karttunen 1977). The set of possible answers is determined by the alternatives to the *wh*-word. In effect this gives us the desired set of alternative propositions.

For a free relative as in (14a), the propositions in the set of possible answers are of the form *Daniel cooked a*, where *a* ranges over dishes.<sup>7</sup>

- (14) a. Whatever Daniel cooks (he will win the cooking contest)  
 b.  $\lambda p \exists x [\text{dish}(x) \ \& \ p = \text{cooks}(d, x)]$

Just as is the case with questions, the free relative in (14a) would be associated with an existential presupposition on the existence of elements in the denotation of the *wh*-word. This is a desired result, since as a concessive free relative, (14a) has the presupposition that Daniel indeed will cook something (obviously, if he doesn't cook anything, Daniel cannot win the cooking contest).

### 4.3. The Role of the Subjunctive

Free relatives that are not formed with an interrogative *wh*-word may not resort to the semantics of questions to arrive at the desired component of meaning - a multiplicity of propositions. The problem is that the definite element in the relative *wh*-word prevents the generation of a set of alternatives. The uniqueness presupposition that comes with the semantics of definiteness prevents variability on the referent of the *wh*-word. This is where the interpretive contribution of the subjunctive comes into effect. The role of the subjunctive is to expand the model of evaluation to include not just the base world but also additional worlds (cf. Farkas 1991, 1996). Thus the subjunctive introduces a modal dimension to the interpretation and a variability to the reference of

<sup>6</sup>Apparently the non-interrogative complementizer in the Hebrew case does not prevent the necessary interpretation from arising, which underscores the fact that  $C^0$  is not interpreted as interrogative in the case of free relatives.

<sup>7</sup>For simplicity, I've assumed that the variable of *what* ranges over singular individuals. It should in fact be allowed to range over pluralities, since the question permits answers where e.g., Daniel cooked moussaka and šiš kebap. This is not problematic to do since *what* is not specified for number.

the *wh*-word. A free relative such as the one in (15a) denotes the unique set of properties that its referent has in all of the alternative worlds, with the built presupposition in (15b). Once we have variability on the referent of the *wh*-word, we can generate the set of alternative propositions, as in (15c). (See also Iatridou and Varlokosta 1998, Dayal 1997 for related proposals about the meaning of free relatives with *-ever*.)

- (15) a. Kakvoto (i) da sgotvi Ivan...  
           what also SUBJ cook-sc 3sg Ivan  
           ‘Whatever Ivan cooks...’
- b.  $\exists w', w'' [\iota x [\text{Ivan cooks } x \text{ in } w']] \neq \iota x [\text{Ivan cooks } x \text{ in } w'']$
- c.  $\lambda p \exists w \exists x [\text{dish}(x, w) \ \& \ p = \text{cooks}(i, x, w)]$

Thus, it follows that free relative adjuncts formed with interrogative *wh*-words do not need the subjunctive, whereas those formed with a relative *wh*-word require the subjunctive. The result in either case is that we derive a plurality of propositions. I will return later on to the question of how this element of meaning is incorporated into the ultimate concessive interpretation.

#### 4.4. The Conditional Meaning

The concessive meaning arising for free relatives functioning as free adjuncts is conditioned by their semantics in a further way. Specifically, I propose that free adjunct free relatives are WEAK, in the terminology of Stump 1985. Their being weak adjuncts determines the way in which they semantically compose with the main clause to arrive at the particular meaning. I argue that the concessive interpretation is derived through a stage where the free adjunct relates to the main clause as a conditional.

Let us briefly present Stump’s 1985 characterization of adjuncts. As he shows, the semantic relationship between free adjuncts and their main clauses is subject to variability. To a large extent, this variability is determined by the type of the free adjunct. As an illustration, consider the sentences below (the examples (16) are Stump’s (3a,b), p.98)

- (16) a. Being a sailor, John sometimes smokes a pipe.  
       b. Lying on the beach, John sometimes smokes a pipe.

The free adjunct in (16a) is interpreted as an adjunct of reason or cause. Thus, (16a) is best paraphrased by sentence with a *because*-adjunct: *Because he is a sailor, John sometimes smokes a pipe*. Not so for the example in (16b). This is best paraphrased by structures with a temporal adjunct: *when he lies on the beach, John sometimes smokes a pipe*. In accordance with this

difference in interpretation, the (a) sentence entails the truth of the adjunct, whereas the (b) sentence does not.

Stump arrives at a formalization of this distinction in positing two classes of adjuncts. In Stump's terminology, adjuncts of the kind in (16a) are *STRONG* and those like the one in (16b) are *WEAK*. Importantly, he shows, the classification of adjuncts into strong and weak is very systematic and it corresponds to the stage-/individual-level distinction (cf. Kratzer 1995). This is a strong argument against more traditional approaches to the interpretation of free adjuncts, which claim that the logical link between the free adjunct and the main clause is determined entirely by context (cf. Quirk et al. 1972). This is evidence that the interpretation of the free adjunct is grammatically determined, despite the absence of an overt connective.

The LFs assigned to the structures in which the two kinds of free adjuncts participate are as follows.

- (17) a. Being a sailor [Sometimes [John smokes a pipe]] (strong)  
 b. Sometimes [lying on the beach] [John smokes a pipe] (weak)

The semantic role of weak adjuncts is to function as the first argument of operators, temporal adverbs of quantification as in the sentences above, or by extension, modals and the generic operator. The semantic role of all weak free adjuncts can then be said to be one of conditional modification.

I propose that conditional modification is the necessary element in the meaning components associated with the concessive free relative construction. The syntax of free adjunction is what determines this aspect of the interpretation of concessive free relatives and in that respect they are not special but exhibit the behavior of other weak free adjuncts. It remains to be shown that indeed the concessive free relatives have the interpretation of weak adjuncts. This is not something obvious, given that concessives always assert their main clause. Thus a structure *Concessive, Modal p* or *Concessive, AdvQ p* would assert *Modal p* and *AdvQ p*, essentially leaving the quantificational operators in these predicates unrestricted (or rather, restricted solely by the context). The meaning of the concessive free adjunct does not seem to be calculated in deriving these interpretations. Yet I submit that this is the case only because we are trying to interpret the concessive as a conditional; the steps in the semantic composition actually proceed the other way around - the concessive interpretation is derived *after* a conditional configuration is established.

Consider first the case of free adjunct free relatives in a modal context. My proposal is that before the concessive interpretation is arrived at, there is a stage in the interpretation in which the free adjunct free relative functions just like a conditional. Importantly, once the concessive interpretation is stripped away, the free adjunct free relative has a conditional interpretation, just like

the weak adjuncts discussed above, and not a *because*-interpretation like the one derived for strong adjuncts.

The interpretation available to free adjunct free relatives when the main clause has episodic interpretation, i.e., it has no modal or another quantificational operator, supports the conclusion that free relatives form weak adjuncts. As Stump shows, strong adjuncts do not change their meaning between quantificational and non-quantificational environments, rather they are uniformly interpreted as adjuncts of reason or cause. Free adjunct free relatives pattern with weak adjuncts again. When they are adjoined to a clause which has an episodic interpretation they are interpreted conjunctively but not as adjuncts of reason or cause.

- (18) a. Whatever Daniel cooked he won the competition.  
 b. Daniel cooked something and he won the competition.

Notice that there is a sense in which a conditional interpretation may be assigned to (18a), although this interpretation will not be the result of a restricted quantificational structure. The interpretation of the adjunct free relative in the example above is related to the *relevance conditionals* discussed in Iatridou 1991. These are conditionals clauses such as *If you are thirsty, there is beer in the fridge* which present the relevant circumstances for asserting the consequent.

#### 4.5. The Concessive Element in the Meaning

As we saw above, the free adjunct structure determines the underlying interpretation of the free adjunct free relative to be one of a conditional. Whereas conditionals of the form *if q, p* relate the truth of a single proposition *q* to the truth of *p*, the free relatives are associated with a multiplicity of propositions  $q_n$  and relate those to the truth of *p*. The role of the additive particle (in English, German, Polish) is to apply exhaustively over the set of propositions. The additive particles contribute a concessive interpretation to the conditional by exhausting the set of conditions under which *p* obtains.

It remains to be seen how the concessive reading is derived in the case of free relative free adjuncts employing negative particles, e.g., Hebrew, Russian, some cases in Bulgarian and Polish. The basic proposal is that these have the interpretation of rhetorical questions. As proposed in Han (1998), *wh*-rhetorical questions are interpreted as assertions mapping the *wh*-word onto negative quantifiers. Thus a sentence such as (19a) is interpreted as in (19b) (example (393) from Han 1998, p. 214).

- (19) a. Who has lifted a finger to help Mary?

- b.  $\neg\exists x[x \text{ lifted a finger to help Mary}]$

It follows then that *negative* rhetorical *wh*-questions would be interpreted as universally quantified.<sup>8</sup> Thus we derive a similar interpretation for the different classes of free adjunct free relatives, despite the differences in underlying structure.

## 5. Conclusions

This paper presented an analysis of a little-studied phenomenon involving free relatives. The main conclusions are that certain free relatives are bare CPs and moreover have propositional interpretation. I identified the meanings available to free adjunct free relatives and related the components of this meaning to the syntactic elements present in the structure. Crosslinguistic differences in the syntax were shown to converge to a common meaning in a principled way.

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<sup>8</sup>This is the reason why, according to Han, negative rhetorical questions do not license NPIs.

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