

it can be construed in either way, though there is little effective difference in meaning between them.

Modal meaning

Infinitival relatives characteristically have a modal meaning comparable to that expressed in finites by *can* or *should*. *Here's something interesting for you to read*, for example, is comparable to *Here's something interesting that you can/should read*. This modal meaning is indeed what makes relatives like those in [4] semantically so close to purpose infinitivals. Where the matrix NP is definite there is very often some explicit or implicit evaluative modification, such as *ideal* in [1ii] or *best* in [1iii].

Infinitivals where the relativised element is subject have a somewhat wider range of interpretations than others, allowing non-modal as well as modal meanings:

- [5] i *She's obviously the person to finish the job.* [modal]
 ii *She was the first person to finish the job.* [non-modal]

Example [i] is like the non-subject examples considered above: we understand “best, most appropriate” and “should” (“the person who should finish the job”). But [ii] has no such modal meaning, being equivalent simply to *the first person who finished the job*. Nominals containing relatives with this kind of interpretation usually contain a modifier such as *only*, *next*, *last*, or one of the ordinals *first*, *second*, etc.

6 The fused relative construction

Classification

An initial illustration of the range of constructions belonging to the fused relative category is given in [1]:

- | | | | |
|-----|--|---|--------|
| [1] | SIMPLE SERIES | ·EVER SERIES | |
| | i a. <i>I spent <u>what he gave me</u>.</i> | b. <i>I spent <u>whatever he gave me</u>.</i> | } [NP] |
| | ii a. <i>I gave him <u>what money I had</u>.</i> | b. <i>I gave him <u>whatever money I had</u>.</i> | |
| | iii a. <i>I'll go <u>where you go</u>.</i> | b. <i>I'll go <u>wherever you go</u>.</i> | [PP] |

On one dimension we have a contrast between the simple series and the *·ever* series, the latter being marked by a relative word ending in *·ever*. Cutting across this is the major category contrast: the fused relatives are NPs in [i–ii], PPs in [iii]. And within the NP category we have a further distinction according as the relative word is a pronoun, as in [i], or a determinative, as in [ii].

6.1 Fused relatives as phrases, not clauses

Traditionally, fused relatives are analysed as clauses, but the view taken here is that they are NPs or PPs. Let us focus on the NP case, examining the evidence for treating examples like the fused relatives in [1i–ii] as NPs. The starting-point is the equivalence between pairs like the one given as [6] of §2:

- [2] i *It would mean abandoning that which we hold most dear.* [antecedent + clause]
 ii *It would mean abandoning what we hold most dear.* [fused relative]

The fused relative is equivalent not to the relative clause *which we hold most dear* but to the NP containing it, *that which we hold most dear*. Compare similarly:

- [3] i *The dog quickly ate the scraps that I'd left on my plate.*
 ii *The dog quickly ate what I had left on my plate.*

These are not of course fully equivalent since [i] contains the lexical item *scraps*, but in [ii], no less than in [i], the object of *ate* denotes something concrete, a physical entity. Clauses, by contrast, denote abstract entities: propositions, events, and so on. These points demonstrate the semantic likeness between the fused relatives and NPs, but there is also strong syntactic evidence for analysing these constructions as NPs.

(a) Subject–verb agreement

- [4] a. *What money she has is in the bank.* b. *What books she has are in the attic.*

The verbs here agree with the fused relatives in subject position. The crucial point is that the *are* in [b] shows that *what books she has* is plural, like the uncontroversial NP *all the books she has*. Clauses functioning as subject, by contrast, always belong to the default 3rd person singular category: *That she has so few books is rather surprising.*

(b) Subject–auxiliary inversion

- [5] a. *What she suggests is unreasonable.* b. *Is what she suggests unreasonable?*

Fused relatives can occur in interrogative and other constructions with subject–auxiliary inversion. Again this differentiates them from clauses: compare *That she proposes to go alone is unreasonable* and **Is that she proposes to go alone unreasonable?*

(c) No extraposition

- [6] a. *What she suggests is unreasonable.* b. **It is unreasonable what she suggests.*

Like ordinary NPs, fused relatives do not occur in the extraposition construction. Here too they differ from clauses: compare *That we should have to do it ourselves is unreasonable* and *It is unreasonable that we should have to do it ourselves.*

(d) No fronting of preposition

- | | | |
|-----|--|---|
| [7] | FUSED RELATIVE | INTEGRATED RELATIVE |
| i | a. <i><u>What she referred to</u> was Riga.</i> | b. <i>The city <u>which she referred to</u> was Riga.</i> |
| ii | a. <i>*<u>To what she referred</u> was Riga.</i> | b. <i>The city <u>to which she referred</u> was Riga.</i> |

When the relativised element is complement of a preposition the fused construction requires that the preposition be stranded, as in [ia]: it cannot be fronted along with its complement, as it can in the integrated relative construction [iib]. The difference in grammaticality here reflects the fact that *which she referred to* is a clause while *what she referred to* is an NP. Fronting the preposition in the integrated construction places it at the beginning of the clause, while fronting it in the fused construction places it before the NP. The deviance of [iia] is thus comparable to that of **To the city which she referred was Riga*. In the integrated case the antecedent *city* and the relative pronoun *which* are distinct and the preposition can come between them, but in the fused case the antecedent and relative pronoun are not distinct and hence there is no place for a fronted preposition to occupy.

(e) Functional range of NPs

Fused relatives occur with the functions that ordinary NPs take:

- [8] i *What he said* was outrageous. [subject]
 ii They criticise *whatever I do*. [direct object]
 iii We'll give *whoever needs it* a second chance. [indirect object]
 iv Things aren't always *what they seem to be*. [subjective predicative comp]
 v She made him *what he is*. [objective predicative comp]
 vi I was ashamed of *what I had done*. [comp of prep]

And, most distinctively, they cannot occur as complement of a noun or adjective (except with exceptional adjectives such as *worth* that take NP complements: see Ch. 7, §2.2). Compare, for example:

- [9] i *I'm sorry that you were inconvenienced*. [clause]
 ii **I'm sorry the inconvenience / what I did*. [NP]

Sorry can take a clause as complement, but not an NP: an NP can occur only as an oblique complement, related by a preposition, as in *I'm sorry for the inconvenience / for what I did*.

(f) Occurrence with integrated relative

- [10] i *Whatever they gave him that he didn't need* he passed on to me. [integrated]
 ii He told me he had done it himself, *which was quite untrue*. [supplementary]

That he didn't need is an integrated relative with the nominal *whatever they gave him* as antecedent: it is part of the NP functioning as object of *passed*. As we have already noted, clauses can only be antecedent for supplementary relatives. This is seen in [ii], where the antecedent for *which* is *he had done it himself*, and where the relative clause has to be supplementary. The crucial point, then, is that a fused relative, like ordinary nominal expressions but unlike a clause, can take an integrated relative as modifier.

6.2 Fused relatives contrasted with open interrogatives

There is a considerable degree of overlap between fused relatives and subordinate open interrogative clauses. Compare, for example:

- [11] i *I really liked what she wrote*. [fused relative]
 ii *I can't help wondering what she wrote*. [open interrogative]
 iii *What she wrote is completely unclear*. [ambiguous]

In [i] the complement of *liked* is an NP approximately equivalent to one with an antecedent nominal + integrated relative clause, such as *the material which she wrote*. In [ii] *what she wrote* expresses an embedded question: it is the subordinate counterpart of *What did she write?* An approximate paraphrase is "I can't help asking myself the question 'What did she write?'" But [iii] can be interpreted in either way. With a fused relative as subject, the meaning is "The material she wrote is completely unclear" (she failed to write clearly); with a subordinate interrogative as subject, [iii] means "The answer to the question 'What did she write?' is completely unclear" (e.g. it is unclear which parts of some book, article, or whatever were written by her). There is no ambiguity in [i] because *like* cannot take an interrogative clause as complement, while [ii] is unambiguous because *wonder* cannot (with irrelevant exceptions) take an NP as complement.

Open interrogatives, whether main clauses (e.g. *What did she write?*) or subordinate (*what she wrote*) normally express what we have called variable questions (Ch. 10, §4.5). The propositional content of such questions contains a variable (“She wrote x ”), and the answers specify values of the variable (*She wrote the preface; She wrote a textbook on phonetics*, etc.). We have also analysed integrated relatives as containing variables, but here the variable is anaphorically bound to an antecedent. In the earlier *no candidate who scored 40% or more*, for example, we have an analysis along the lines of “no candidate x [x scored 40% or more]”, i.e. “no candidate x such that x scored 40% or more”. In the case of fused relatives the antecedent and pronoun are not syntactically discrete, but we still have linked occurrences of the variable in the interpretation, e.g. for [11i] “I liked the x such that she wrote x ”. Both relative and interrogative thus contain the “she wrote x ” component: in the relative case, the variable is bound to an antecedent, whereas in the interrogative case the value of the variable is to be given in the answer to the question.

Consider the following further examples in the light of this account:

- [12] i *The dogs wouldn't eat what she gave them.* [fused relative]
 ii *I told him what she gave them.* [open interrogative]
 iii *I told him what she suggested I tell him.* [ambiguous]

Again, the fused relative is roughly equivalent to an NP containing antecedent + integrated relative, e.g. *the food which she gave them*, so we might analyse [i] as “The dogs wouldn't eat the x such that she gave them x ”. There is again no ambiguity here because *eat* cannot take clausal complements. Example [iii] can be glossed as “I told him the answer to the question ‘What did she give them?’” – i.e. “I told him the value of the variable in ‘She gave them x ’”.

Tell can take NP complements, as in *I told him the news*, but the things you can tell are distinct from the things you can give, so there is no fused relative interpretation “#I told him the x such that she gave them x ”. However, if we change the example to remove this incompatibility, we can get an ambiguity with *tell*, as in [12iii]. The interrogative interpretation matches that for [ii]: “I told him the answer to the question ‘What did she suggest I tell him?’” – i.e. “I told him the value of the variable in ‘She suggested I tell him x ’”. And the fused relative interpretation is “I told him the x such that she suggested I tell him x ”.

The difference can be brought out by imagining the case where she suggested I tell him that his offer would have to be raised. In this scenario the interrogative interpretation of [12iii] is equivalent to *I told him that she suggested I tell him that his offer would have to be raised* (and I thereby implicitly distance myself from this evaluation of his offer), while the fused relative interpretation is equivalent to *I told him that his offer would have to be raised* (i.e. the value of x in “I told him the x such that she suggested I tell him x ” is “his offer would have to be raised”).

We have focused above on the semantic difference between the constructions. We now turn to the syntactic differences.

(a) NP vs clause

We have shown that fused relatives (other than the prepositional ones introduced by *where*, *when*, etc.) are NPs; interrogatives, however, are not: they are clauses. The points made in §6.1 above concerning agreement, subject–auxiliary inversion and extraposition, preposition fronting, and adjective complementation can therefore be applied to the

distinction between fused relatives and interrogatives:

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|-----------|--|------------------|
| [13] i a. | <i>What ideas he has to offer are likely to be half-baked.</i> | [fused relative] |
| | b. <i>What ideas he has to offer remains to be seen.</i> | [interrogative] |
| ii a. | <i>Is what she wrote unclear?</i> | [fused relative] |
| | b. <i>It is unclear what she wrote.</i> | [interrogative] |
| iii a. | <i>What he's referring to / *To what he's referring is Riga.</i> | [fused relative] |
| | b. <i>I can't imagine what he's referring to / to what he's referring.</i> | [interrogative] |
| iv | <i>He's not sure what he should say.</i> | [interrogative] |

The subject of [ia] is plural and must therefore be an NP: the corresponding clause in [ib] belongs to the default 3rd person singular category. In [ii] we have subject–auxiliary inversion in [a], so *what she wrote* must be an NP, and in [b] we have extraposition, so here *what she wrote* must be a clause. Note that both examples lack the ambiguity of *What she wrote is completely unclear* ([11iii]). In [13iii] the possibility of fronting the preposition in [b] shows that the complement of *imagine* is a clause, not an NP.¹⁴ And the complement of the adjective *sure* in [13iv] can only be interrogative, matching the interpretation “He is not sure about the answer to the question ‘What should he say?’”.

(b) Differences in unbounded dependency words

Who, whom, whose, which, why, and how are found in fused relatives only under very restrictive conditions (described below), but they occur freely in interrogatives. The contrast between fused relatives and interrogatives is quite clear:

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|-----------|-------------------------------------|---|-------------------|
| [14] i a. | <i>I agree with what she wrote.</i> | b. <i>*I agree with who spoke last.</i> | } [relative] |
| ii a. | <i>I accepted what he offered.</i> | b. <i>*I accepted which he offered.</i> | |
| iii a. | <i>I wonder what she wrote.</i> | b. <i>I wonder who spoke last.</i> | } [interrogative] |
| iv a. | <i>I know what he offered.</i> | b. <i>I know which he offered.</i> | |

Conversely the *-ever* series of forms occur freely in fused relatives, but they are generally not permitted in interrogatives:¹⁵

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|-----------|---|-------------------|
| [15] i a. | <i>He accepted what/whatever she offered.</i> | } [relative] |
| | b. <i>He planted roses where/wherever there was enough space.</i> | |
| ii a. | <i>He didn't tell me what/*whatever she offered.</i> | } [interrogative] |
| | b. <i>He went to see where/*wherever there was enough space.</i> | |

(c) Elliptical reduction

Open interrogatives (whether main or subordinate) can be reduced to an interrogative phrase if the rest of the clause is recoverable anaphorically, but such reduction is quite impossible with fused relatives, just as it is with non-fused ones. Compare:

¹⁴This last point is of only limited value as a distinguishing test because the stranded preposition construction is often strongly preferred or else the only option even in the subordinate interrogative construction (cf. Ch. 7, §4.1), as in *I can't imagine what he's getting at / *at what he's getting*.

¹⁵We ignore here cases where *ever* (often written as a separate word) has a quite different sense, like that of *on earth*: *I can't imagine what ever he was thinking about*. There is, however, one type of interrogative where the *-ever* forms are found, namely interrogatives functioning as exhaustive conditional adjuncts, as in *He won't be satisfied, whatever you give him*. This construction is discussed (and contrasted with the fused relative) in Ch. 11, §5.3.6.

- [16] i a. A: *Jill gave him something last night.* B: *What?* } [interrogative]
 b. *Jill gave him something last night, but I don't know what.* }
 ii a. **Jill gave him something last night, but he lost what.* [fused relative]
 b. **Jill gave him a book last night, but he lost the book which.* [integrated relative]

In [ia] *what* is equivalent to interrogative *What did she give him?*, while [iia] shows that relative *what she gave him* cannot similarly be reduced to *what*. Analogously in [ib/iib].

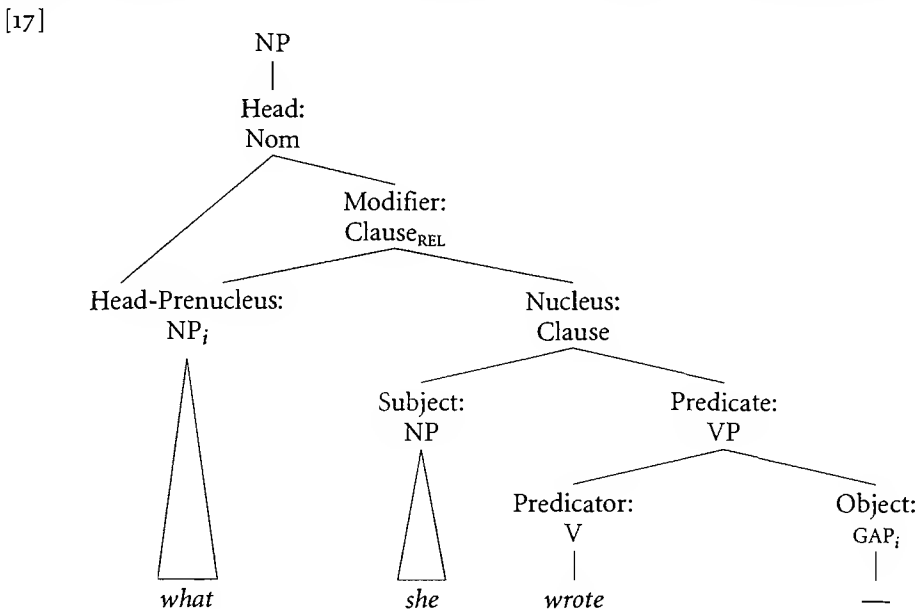
(d) Infinitivals restricted to the interrogative construction

A further difference between open interrogatives and fused relatives is that only the former can be infinitival in form: *I wonder what to buy*, but not, say, **I can't afford what to buy* ("I can't afford that which I should buy").

6.3 Syntactic analysis

The analysis of NP structure given in Ch. 5 allows for the head to fuse with an adjacent dependent, i.e. for the two functions to be realised jointly. In *Many would agree with you*, for example, the determinative *many* jointly realises the determiner and head functions. As implied by the term, we invoke the same concept of functional fusion in our analysis of fused relatives. This time the head of an NP fuses with the relativised element in a relative clause.

As an example, take *what she wrote* as in [11i] above, *I really liked what she wrote*. We have demonstrated that the fused relative is an NP, and we take *what* to realise simultaneously the head of that NP and the prenuclear element in the relative clause:



Case

The pronoun *what* in [17] is simultaneously head of the whole NP and object (in prenuclear position) in the relative clause. In constructions with personal *who* and *whoever*, the pronoun has to satisfy the case requirements of both the relative clause and

the matrix clause in which the whole NP is functioning. Compare:

- [18] i [Whoever is responsible for the damage] must pay for it.
 ii He will criticise [whomever she brings home].
 iii ?[Whomever he marries] will have to be very tolerant.
 iv ?She lunches with [whomever is going her way after morning classes].

In [i] both the whole NP (bracketed) and the relativised element (underlined) are subject of their respective clauses: the nominative form matches both requirements. In [ii] both the whole NP and the relativised element are objects, and accusative is fully acceptable though somewhat formal in style. In [iii–iv], however, there is a clash between the function of the whole NP and that of the relativised element – respectively subject and object in [iii], object of a preposition and subject in [iv] – and the result is at best very questionable. *Whoever* would be preferable in both, but many would regard it as less than fully acceptable in formal style.

6.4 Relative words in the fused construction

The relative words used in the fused construction are as follows:¹⁶

- [19] i SIMPLE *who what which where when how while*
 ii COMPLEX *whoever whatever whichever wherever whenever however*

Who and *whoever* have distinct nominative and accusative forms, illustrated for *whoever* in [18i–ii]; for the genitive of *whoever* see footnote 17.

The properties that distinguish *who*, *what*, and *which* in fused relatives are the same as in interrogatives, so that the system is significantly different from that found in non-fused relatives:

[20]	FUSED RELATIVES OF OPEN INTERROGATIVES	NON-FUSED RELATIVES
i PRONOUNS		
<i>who</i>	personal	personal
<i>what</i>	non-personal	—
<i>which</i>	—	non-personal
ii DETERMINATIVES		
<i>what</i>	non-selective	—
<i>which</i>	selective	(non-selective)

The gender contrast of personal vs non-personal is thus realised by *who* vs *what*, not *who* vs *which*, as in non-fused relatives. And *which* in fused relatives, as in interrogatives, is a determinative, contrasting with *what* as selective vs non-selective. In non-fused relatives determinative *which* is non-contrastively non-selective (and found only in the supplementary type). The same properties apply to the *-ever* forms, as illustrated in:

- [21] i [Whoever finishes first] will win a prize. [personal]
 ii [Whatever you can let us have] will be very much appreciated. [non-personal]
 iii I'll use [whichever edition I can get hold of]. [selective]
 iv He appears to have lost [whatever interest he ever had in it]. [non-selective]

¹⁶There are also archaic variants of the *-ever* series with *-so*: *whosoever*, *whatsoever*, etc.