On the semantic widening of underspecified wh-elements

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1. Introduction

A number of languages exhibit a curious asymmetry within their paradigms of bare (interrogative/exclamative) wh-phrases. On the one hand, these paradigms comprise a set of wh-elements whose semantic restriction - the element determining the domain of individuals that are potential values of the variable bound by the wh-quantifier - is clearly recognizable. Examples of this kind in German, which we choose arbitrarily for illustration, are wer ‘who’ (restriction [+human]), wo ‘where’ ( [+place]), wann ‘when’ ( [+time]), etc.

On the other hand, these paradigms contain a wh-phrase whose restriction is less clearly recognizable - again in German, was ‘what’ - and which is usually characterized, in the literature, as being [-human] or [-animate]. This wh-phrase, which from now on we will call WHAT when we refer to it in general - that is, independently of its form(s) in a particular language -, often has a number of possible additional meanings or uses that are intuitively quite different from the canonical meaning, roughly equivalent to ‘what thing/ object’. This multiplicity of meanings is not a uniform phenomenon across languages, in the sense that in a given language WHAT may or may not have one or the other of the set of meanings observed elsewhere.

In what follows we analyze WHAT in three languages, two of which are Romance languages, namely French and the North-Eastern Italian dialect Pagotto, spoken in the Eastern Bellunese area of Northern Veneto. We provide a comparative analysis of the distributional and interpretive properties of French que and Pagotto cossa and focus on the fact that both of them seem to allow for a sort of semantic extension which results in interpretations different from the ordinary one, and coinciding in each case with sentential meanings that are not standard requests for information. Furthermore, including German was ‘what’ in this study allows us to show that the phenomenon of semantic widening extends beyond the Romance area.

Pagotto plays a particular role in the comparison because, contrary to que and was, cossa is “specialized” in expressing the “extended” uses of what while the standard interrogative meaning is expressed by che. Furthermore, the difference in form is correlated to a
striking difference in syntactic behaviour. We will show that this overt dissociation of two “faces” of what in Pagotto is a key to the understanding of the phenomenon of widening.

We will introduce and characterize the different meanings of what below, and oppose the existence of this variety of apparently unconnected semantic values to the absence of a comparable range in the interpretive possibilities of the wh-phrases corresponding to who, where, when, etc.\(^5\)

Since there is no usual term available to refer to these noncanonical uses of what, we choose the term “pseudo-questions” and apply it to nonstandard questions (i.e. interrogatives which are not pure requests for information) as well as to certain nonquestions, that is, certain exclamatives.

The paper is organized as follows. Section 2 gives a survey of Pagotto interrogative syntax and presents the paradigm of cossa. Section 3 introduces the corresponding uses of French que, and section 4 the corresponding uses of German was. In Section 5 we discuss the respective positions of these elements in the higher functional structure of the sentence. Section 6 is devoted to the question of the relation between the different types of use of what. Section 7 concludes the paper.

2. Cossa in Pagotto

2.1 Short survey of Bellunese wh-syntax

In the Northern Veneto dialects wh-phrases display in main wh–questions very peculiar distributional properties.

Considering the position occupied in main interrogatives, Munaro (1997) identifies three different classes of wh-phrases: wh-phrases which always move to a sentence initial position, wh-phrases which optionally do so, wh-phrases which never do so and always appear in sentence internal position.\(^4\)

As for the wh-element what, it can be expressed in these varieties by means of two different items, either che or cossa, which display complementary distributional properties; the former appears in situ while the latter appears in sentence initial position:

\[(1)a. \quad *\text{Che à-lo magnà?} \\
\quad b. \quad \text{A-lo magnà che?} \\
\quad \quad \text{‘What has he eaten?’}
\]

\[(2)a. \quad \text{Cossa à-lo magnà?} \\
\quad b. \quad *\text{A-lo magnà cossa?} \\
\quad \quad \text{‘What has he eaten?’}
\]
The ungrammaticality of (2b) is explained by Munaro (1997) resorting to the idea that, despite appearance to the contrary, cossa has an internal structure which is more similar to that of complex wh-phrases than to that of bare wh-elements.

From the interpretive point of view, in some of the varieties subsumed under the label Bellunese che and cossa are virtually interchangeable, that is, (1b) and (2a) are synonymous. There is, however, a dialect of the Bellunese area, the Pagotto dialect, in which the real wh-question, intended as genuine request for information, is (1b), while (2a) has particular uses which we present in the following section.

We will try to connect the complementary distribution of these two wh-elements to their semantic value and see how the interaction between them can be formally accounted for.

2.2 Cossa and pseudo-questions in Pagotto

2.2.1 Main contexts

As anticipated, main interrogatives containing the wh-word cossa are not interpreted as real questions in Pagotto; in this section we are going to examine the different interpretations that this wh-item can have in various contexts.

2.2.1.1 Argumental use of cossa in pseudo-questions

Cossa is used argumentally, that is, in its primary meaning of what, in pseudo-questions, whereby we mean sentences that correspond syntactically to interrogative structures (that is, displaying inversion between inflected verb and subject clitic pronoun) but through which the speaker does not intend to acquire new information about a specific subject:

(3) Cossa sé-tu drio magnar (che)?!
    what are-cl behind eat (what)
    ‘What on earth are you eating?!’

This sentence expresses the speaker’s surprise, dismay or disapproval concerning what is being eaten, that is, his opinion that the person referred to (i.e. the subject of the sentence) is eating some strange and unexpected thing. Consider now the following sentences:

(4) Cossa u-tu che fae (che)?!
    what want-cl that do (what)
    ‘What do you want me to do?!’
The sentence in (4) can not be used as a question inquiring about the addressee’s opinion or will, but can only be interpreted as the speaker’s admission of one’s having no choice. Similarly, the utterer of (5) does not really inquire about the reason for the people’s insistent looking at him, but simply expresses his own annoyance at that fact.

2.2.1.2 ‘Why’-like cossa

Within the domain of non-standard questions there seems to be another group of contexts in which cossa has a slightly different meaning, roughly corresponding to why, but where the sentence is again interpreted as expressing the speaker’s surprise, annoyance or disapproval with respect to the event referred to:

(6) Cossa zighe-tu (che)?! what shout-cl (what)
‘Why are you shouting?!’

The example in (6) contains an intransitive verb, which excludes the possibility for cossa to be interpreted as the direct object of the predicate; the utterer of (6) points out that he does not really see any valid reason why the person should shout and expresses his lively disapproval towards the fact that he does.7

With transitive verbs, full grammaticality can be achieved with the addition of the periphrastic expression (par far) che, which disambiguates the semantic value of cossa, (as in (7a)), or with the introduction of a verb with a modal function (like go in (7b)) thereby creating a periphrastic structure which disambiguates, making it clear that the argument of the verb is the sentence internal DP and not cossa:

(7)a. Cossa compre-tu n’altro giornal (par far) che?! what buy-cl another newspaper (for do) what
b. Cossa va-tu a comprar n’altro giornal (par far che)?! what go-cl to buy another newspaper (for do what)
‘There is no need for you to buy another newspaper’

By uttering (7) the speaker expresses the opinion that there is absolutely no need for the addressee to buy another newspaper.8

2.2.1.3 ‘How much’-cossa
Still another use of *cossa* is attested in the structure exemplified in (8), through which the speaker expresses the opinion that the person referred to, being in the position of lending a helping hand, is supposed to do so, although he does not:9

(8) Cossa ghe coste-lo (che) iutârli?!
    what him costs-cl (what) help-them
    ‘What does it cost him to help them⁈’

An analogous quantificational interpretation can be expressed by *cossa* also in the following exclamative structure, where the speaker points out the fact that the subject is fond of ice-cream to a remarkable extent:

(9) Cossa che (no) ’l ghe piaze, al gelato!
    what that (not) cl-him-likes, the ice-cream
    ‘How (much) he likes ice-cream! исполнины.

Consider now (10), where the *wh*-element realizes an amount expression (obligatorily) selected by the verb predicate:10

(10) Cossa che’l costa/peza!
    what cl-costs-weighs
    ‘How much it costs/weighs!’

Both in (9) and in (10) the *wh*-element is followed by the complementizer *che* and the verb is preceded by the subject clitic pronoun belonging to the assertive paradigm.11

**2.2.2 Embedded contexts**

In this section we will consider some data concerning the syntactic and semantic behaviour of *cossa* in embedded contexts and, in particular, we will try to determine if *cossa*, in the particular usages discussed above, can be interpreted as depending on the embedded predicate.12

In embedded contexts *cossa* is not amenable to the interpretations discussed in the previous section; so, the example in (11a) is acceptable as ordinary indirect question (see the preceding note), but ungrammatical in the reading expressing the subject’s annoyance (about what has been done); similarly, (11b) and (11c), with *cossa* functioning as causal and quantificational expression respectively, are ungrammatical:
(11)a. *Al me à domandà cossa che i à fat.
   cl-me-has asked what that cl-have done
   ‘He asked me what they have done.’
b. *Al me à domandà cossa che i compra n’altro giornal
   cl-me-has asked what that cl-buy another newspaper
   ‘He asked me why they buy another newspaper.’
c. *Al me à domandà cossa che ghe piaze al gelato
   cl-me-has asked what that cl-likes the icecream
   ‘He asked me how (much) she likes icecream.’

The grammaticality status of (11) might suggest that the uses discussed in section 2.2.1 are crucially related to the availability of a particular structural configuration which only obtains in main questions.

As we have seen above, cossa can introduce a pseudo wh-question in which the wh-word che can optionally appear in situ: given the impossibility of interpreting an example like (3) as a real question, we predict the ungrammaticality of (12a), through which the addressee is asked to repeat his statement (and where the rhetorical interpretation is probably excluded by this particular pragmatic value of the sentence):

(12)a. ??Cossa à-tu dit che l’à fat?!
b. ?Cossa à-tu dit che l’à fat che?!
c. A’-tu dit che l’à fat che?
   (what) have-cl said that cl-has done (what)
   ‘What have you said that he has done?’

The only fully grammatical version is (12c), with no wh-item in initial position and che inside the embedded clause; (12b), with cossa in initial position and che in sentence internal position, is almost acceptable but still with the particular interpretive implication that the speaker is somehow unpleasantly surprised by the news. The data in (12) can be interpreted as indicating that argumental cossa (in its non-canonical reading) can be construed with the embedded predicate only when doubled by the wh-element che in situ; these data might also suggest that cossa does not raise from the embedded clause but is in fact inserted as expletive element in the position where it appears.

Let us examine now a case where cossa, in the why-like reading, should be construed with an embedded intransitive verb, in order to determine to what precise extent it can be interpretively related to the embedded predicate:

(13) *Cossa pensi-tu che i sia drio far barufa (che)?!
    what think-cl that cl-be behind do quarrel (what)
‘There is no reason for you to think that they are quarrelling’

As shown by (13), in the why-like reading cossa cannot usually be construed either with the matrix or with the embedded predicate, independently of the presence of che.\textsuperscript{13}

Summarizing, when extracted from a subordinate clause, cossa can be interpreted with the embedded predicate only in its non-canonical argumental reading and if doubled by che.

2.3. Division of labor: the dichotomy che - cossa

Let us address now the question of the semantic specialization of cossa and of the possible unity underlying its different uses.

This issue is strictly connected with the fact that the clear distributional asymmetry between che and cossa seems to reveal an opposition between two major types of uses of what. This dissociation, which we take to manifest overtly a distinction that is realized covertly in other languages, suggests that the set of semantic values associated with cossa somehow forms a unity, in the sense that these uses share a common (syntactic or semantic) core.

Given that che and cossa each specialize for mutually exclusive subdomains of what, a crucial question is how, and along what lines, this division is realized. Let us ask, then, what the respective sets of readings of che and cossa are.

Starting from the observation that cossa takes on quite particular meanings, an apparently natural divide could be imagined between the two types of uses of what we hypothesize in the three languages: the one separating the argumental readings from the non-argumental ones. Intuitively speaking, one of the two wh-phrases would be largely parallel to who (the “true” what), the other quite different (a “pseudo”-what); as for Pagotto, che would correspond to the former, and cossa to the latter; the actual meanings of cossa might be determined by structural or contextual factors.

But the actual division of labor between the two what's is more complex. Strikingly, cossa, “specializing” by hypothesis vis-à-vis of che, is not specialized for nonargumental values, as might a priori be expected given that che seems to specialize in argumental values. It seems to be more adequate to oppose standard interrogative argumental values - expressed by che - and nonstandard values of different kinds, expressed by cossa. More precisely, the division of labor involves the standard interrogative argumental value of che on the one hand, and the “noncanonical” values, argumental as well as nonargumental, of cossa, on the other.
3. French *que*

In presenting the different uses of *que*, we will concentrate here on the main types and return to particular subtleties in the context of the later theoretical discussion.

3.1. Interrogative (“true question”) readings of *que*

For the purposes of this article, we will make two simplifications which concern points that are irrelevant to our discussion. First, we will largely abstract away from the form *quoi*, which has a very particular distribution (in fact, complementary to that of interrogative *que*, except in infinitival sentences). Second, we will treat here the simple form *que* and the complex form *qu’est-ce que* ‘what is it that’ (a form only superficially similar to the focus construction) as if they were a unique form.14

With this proviso, (14) and (15) are *wh*-questions in which *que* and *qu’est-ce que* are interpreted as standard interrogative argumental WHAT. In (16) and (17) *que* and *qu’est-ce que* function as selected arguments of a quantity/amount type.

(14) Que faites-vous?
    what do-you
    ‘What are you doing?’
(15)a. Qu’est-ce que vous faites?
       (same as (14))

(16)a. Que gagne-t-il?
       ‘What does he earn?’
b. Que coûte ce voyage?
       ‘What does this travel cost?’
(17)a. Qu’est-ce qu’il gagne?
b. Qu’est-ce que coûte ce voyage?
       (same as (16))

The examples (16) and (17), then, correspond to the use of *cossa* exemplified in note 9, while (14) and (15) have no direct corresponding structure with *cossa* in Pagotto, although such use is attested in other varieties of the Bellunese area.
3.2. *Que* in pseudo-questions

3.2.1. Argumental *que* / *qu’est-ce que*

(18) instantiates an interrogative structure with exclamative intonation and a surprise or disapproval reading, a case analogous to (3). (19) is the rhetorical question corresponding to the Pagotto *u-tu* construction exemplified in (4). In both cases, *qu’est-ce que* is again possible instead of *que*:\(^\text{15}\)

(18) Que faites-vous?!
    ‘What are you doing?!!

(19) Que veux-tu que j’y fasse?
    what want-you that I-about-it do
    ‘How can I help it?’

(20) questions the reasons of the event described and conveys annoyance or disapproval, as does the Pagotto analogue in (5). *Qu’est-ce que* may replace *que*:

(20) Qu’a-t-il à nous regarder?!
    what has-he to us look-at
    ‘Why does he look at us?’

3.2.2. ‘Why’-like *que*

In contemporary French, *que* is rare in a ‘why’-like use in colloquial style and standard style. Nonetheless, many speakers have clear intuitions about this *que*. They agree on a second property of *que* that distinguishes it from Pagotto *cossa*, namely the fact that ‘why’-like *que* is almost entirely restricted to negative contexts. This intuition is implicitly confirmed by the examples given by grammarians or in dictionaries. The following sentence, characterized as “elegant turn” by Martinon (1927, 248n.) is one of the extremely rare nonnegative examples:

(21) Que tardez-vous?
    what are-long-you
    ‘Why are you (so) long (doing it) ?’

In present-day French the sentence is judged “très recherchée” and only acceptable with an added *donc* at the end.\(^\text{16}\) Martinon gives a second example, which is negative, and notes that *pas* is not admitted in this case:
Que ne partez-vous?
‘Why don’t you leave?’

As in the case of Pagotto, ‘why’ is only an approximative translation, as shown by the comparison of (23), from Martinon (1927, 541), and (24), its analogue with pourquoi replacing que:

(23) Que n’écrit-il en prose?
‘Why doesn’t he write in prose?’

(24) Pourquoi n’écrit-il pas en prose?
‘Why doesn’t he write in prose?’

(24) can be interpreted as a true question, that is, it can serve to inquire about the reasons of the author’s writing poetry. It can also convey the speaker’s surprise or perplexity, his failure to see the reasons preventing the author from writing prose, and even the suggestion that the author should do so. These readings, additional possible readings in the case of pourquoi, are the “normal” readings when que is the question word, as in (23).

3.2.3. ‘How much’ que

We considered quasi-argumental cases of ‘how much’ que under (16) and (17), above. Nonargumental ‘how much’ que appears in exclamatives, where it alternates with comme, as shown by (25)-(26):

(25)a. Qu’il vous aime!
   ‘How much he loves you!’
   b. Qu’il écrit bien!
   ‘How well he writes!’

(26)a. Comme il vous aime!
   b. Comme il écrit bien!
   (same as (25a,b) respectively)

(25) and (26) are borrowed from Martinon, (1927, 502), who also notes that in familiar style, ce que is acceptable in place of que. The same is true of qu’est-ce que:

(27) Qu’est-ce qu’il vous aime!
   (same as (25a), (26a))
In summary, all the uses of Pagotto *cossa* described in section 2.2.1 are attested with French *que*, though only under very restrictive stylistic and licensing conditions as far as ‘why’-like *que* is concerned. However, *que* differs from *cossa* in that it also has the standard interrogative uses which in Pagotto are limited to *che*.

4.  **The types of use of German *was***

German *was* patterns with French *que* in exhibiting both the standard argumental use and some noncanonical uses. In this respect, then, German and French contrast with Pagotto, where the canonical argumental use of *cossa* is not attested in main sentences.

4.1.  **Interrogative (“true question”) readings of *was***

Example (28) contains an instance of standard interrogative argumental *WHAT*. In (29a,b) *was* is a selected argument of a quantity/amount type:

(28)  Was suchst du?
      what look-for you
      ‘What are you looking for?’

(29)a.  Was verdient er?
       ‘What does he earn?’

b.  Was kostet das?
    ‘What does that cost?’

4.2.  **Was in pseudo-questions**

4.2.1.  **Argumental *was***

(30) instantiates an interrogative structure with exclamative intonation and a surprise or disapproval reading (cf. (3), above):

(30)  Was machst du denn?!
      what do you ‘denn’
      ‘What are you doing?!’
(Concerning *denn*, see section 4.2.2, below). There is no direct equivalent of the French rhetorical *que veux-tu* construction in German, but in the presence of the particle *schon, was* can have a rhetorical interpretation:

(31) Was macht das schon?
what makes that ‘already’
‘What difference does it make?’ = ‘It makes no difference.’

4.2.2. ‘Why’-like *was*
This instance of *was*, contrary to French ‘why’-like *que*, belongs to colloquial style. As can be seen from the unacceptability of (32a), it requires some form of “licensing”; if the particle *denn* is added, the sentence becomes acceptable; so ‘thus’ has a comparable effect in (32c):

(32)a. *Was lacht der?!
what laughs he
b. Was lacht der denn?!
what laughs he ‘denn’
‘Why is he laughing?!’
c. Was schaust du mich so an?!
what look you at me so
‘Why are you looking at me like that?!’

Sentences of this type can be interpreted as true questions with an expression of surprise, but also as pseudo-questions with an expression of disapproval.

4.2.3. ‘How (much)’-like *was*
Quasi-argumental cases of ‘how much’ *was* were given in (29). The degree reading of *was* is exemplified in (33):

(33)a. Was hast du dich verändert!
what have you yourself changed
‘How you changed!’
b. Was ist das doch schwierig!
what is that ‘doch’ difficult
‘How difficult that is!’

In summary, German *was* has the same types of uses as Pagotto *cossa* and *che*. 
5. The derivation of pseudo-questions

In this section we put forth a proposal concerning the position occupied by the wh-elements *cossa* and *que* in “pseudo”-questions and extend the analysis to German *was* without arguing directly for it.

Our argumentation relies on Pollock, Munaro and Poletto’s (1999) analysis of *wh-in-situ* phenomena, which views the puzzling distributional asymmetry between French *que* and Bellunese *che* as a deceptive phenomenon. The authors develop a new approach which exploits Rizzi’s (1997) split-CP and the notion of remnant-IP movement proposed by Kayne & Pollock (1998); they assume that Bellunese *che* and French *que* in main *wh*-questions raise to the specifier position of *Operator*-P, a low projection of the CP layer; this *wh*-movement is followed by raising of the remnant IP to the specifier position of *FocusP* (or, in French, by raising of its head I° (with V° adjoined) to Foc°) in order to check the focus feature of interrogative clauses.

The different position of the *wh*-element with respect to the predicate in the two languages is determined by the subsequent derivational step: in French the further raising of *que* to the specifier position of *(Interrogative)*ForceP (a higher functional projection of the CP layer), in Bellunese adjunction of the inflected verb to the (non assertive) subject clitic pronoun merged in the head Force° of the same projection; as this type of subject clitic, by its intrinsic morphological properties, can check the Force feature, further *wh*-movement of *che* to [Spec,Force] is dispensed with. This produces the deceptive appearance that in Bellunese, unlike in French, there is no raising of the *wh*-element to a functional specifier position of the left-periphery.

The resulting structure for an example like (1b) *Alo magnà che* is illustrated in (34):

(34) $\text{[IntForceP[IntForce°à-lo][FocusP[IP tà magnà tche][OpP[che]\ldots tIP]]]}$

Under this new analysis there is no genuine *wh-in situ* in Bellunese: all *wh*-constituents move overtly; the apparent nonmovement of the *wh*-element *che* appearing in sentence internal position results from the raising to a left-peripheral position lower than the one occupied by the sentence initial *wh*-element (*cossa*, *que*), with remnant IP raising to a position in between.¹⁹

Building on Pollock et ali’s (1999) analysis, we will propose that the particular semantic properties shared by *cossa* and *que* in their non-standard uses are due to their overt movement to specific structural positions at the left edge of the sentence.

As noted, the mentioned authors propose that in Bellunese the inflected verb adjoins to the left of the subject clitic within the head Force°; as *cossa* precedes the inflected verb, it must be located either in [Spec,IntForceP] or in the specifier of a higher functional projection. On the other hand, except in exclamatives (cf. (9/10) above), *cossa* can never be followed, in
the particular contexts analyzed in section 2.2.1, by the complementizer che; this, as argued by Munaro (1998b), is taken to occupy the head of a projection ExclP, whose specifier is the landing site of bare wh-phrases in main wh-exclamatives. In exclamatives, therefore, we take cossa to appear in the configuration (35):

(35)  [ExclP cossa[Excl° che][IP pro[I° l’à][VP[V° magnà] t cossa]]]

In all the other cases, cossa must occupy the specifier position of a functional projection lower than ExclP.

Conceptually, we will follow the by now well-established tendency to associate each interpretively relevant feature to a specific head (projection) in the functional structure of the sentence; hence we propose that, given the peculiar interpretive implications that are associated with the structures we have examined, the position occupied by cossa and que in this kind of sentences cannot be the same as the one of wh-phrases in ordinary wh-questions.

Therefore, given what we have said above, it must be the specifier of a projection located between ExclP and IntForceP. In trying to identify a plausible candidate, it is necessary to take into account the fact that interrogative structures containing cossa-que-was the speaker expresses his personal attitude towards the event described, giving vent to a feeling which ranges from mild surprise up to explicit disapproval.

We therefore postulate the existence, inside the CP layer, of a projection Att(itude)-P which encodes the speaker’s attitude about the propositional content expressed by the sentence; given what we have said above, we obtain the following sequence of functional projections in the upper part of the CP-layer:

(36)  ExclamativeP  AttitudeP  InterrogativeForceP

Assuming that the marked value of the head Att° corresponds to the speaker’s negative attitude towards the event, this reading, being the marked option, must be activated by filling [Spec,AttP] with argumental WHAT or non-argumental WHAT, leading to the expression of the speaker’s personal attitude towards the propositional content of the sentence.

Hence, we propose that in pseudo-questions cossa and que occupy the specifier of the functional projection Att(itude)-P; the relevant structure of an example like (37) is then (38):

(37) Cossa à-lo magnà (che)?!
    what has-cl eaten (what)
    ‘What (on earth) has he eaten?!’

(38)  [AttP cossa [IntForceP[IntForce° à-lo][FocusP[IP t à magnà (tche)][OpP(che)...tIP]]]]
From the interpretive point of view, this proposal captures under a single label the particular implication which is common to the various non-canonical readings of *cossa-que-was* discussed above, namely the fact that the speaker, in the explicit expression of a feeling of surprise-annoyance-disapproval, communicates his personal attitude concerning the event referred to.\(^{23}\)

As for the nonargumental *WHAT* expressing exclamative degree, exemplified in (9), we speculate that this interpretation derives from the interaction between the semantic-structural deficiency of that *wh*-item and the core semantic feature *degree* associated with the head of the functional projection hosting exclamative *wh*-phrases, which we take to be one expressing a certain degree of deviance form a standard value.\(^{24}\)

### 6. Deficiency and the unity hypothesis

In this section, we will address the relation between the different readings of *WHAT* that we have isolated in the three linguistic systems.

#### 6.1. The unity hypothesis

Given the intuitively clear differences in meaning of the types of use identified above, and assuming that these meanings cannot be related to each other, a relation of homophony might be taken into consideration. Accordingly, the *wh*-phrases in (39a-d) would be elements independent of each other, and similar by accident. Even counting the argumental *was* in (39a,b) as one and the same item, the difference of the readings might be taken to point to the existence of three homophones.

(39)a. Was suchst du?
   ‘What are you looking for?’

b. Was machst du denn?!
   ‘What are you doing?!!’

c. Was lacht der denn so?
   ‘Why does he laugh like that?’

d. Was hast du dich verändert!
   ‘How you changed!’

The hypothesis that (39) exemplifies (at least) three different lexical *wh*-phrases which are accidentally homophonous could appear reasonable as a first step limited to German. It is, however, very unlikely that the equivalents of *was* in Pagotto and French are also homo-
phonous by chance. The hypothesis, therefore, is plausibly reversed: the phenomenon we are considering is not a case of homophony, but of (a sort of) polysemy. There is one was in German, a *wh*-phrase which has three readings (at least). Let us call this the unity hypothesis. Why the readings are so different from each other is a question we will come back to. The same considerations apply to *que* and *cossa*.

The unity hypothesis is strongly reinforced by a second basic fact: the noncanonical readings of the lexical items *was*, *que* and *cossa* are the same, and not randomly different readings in each of these languages. It is again very unlikely that *what* should have the same spectrum of meanings across languages by chance. This, however, would be expected in the case of independent, accidentally homophonous *wh*-phrases. The fact that the readings associated with *what* are the same - more precisely, that they seem to belong to a shared set of few elements - points to general principles which determine the relations between them.\(^{25}\)

6.2. The unique status of *what* and the underspecification hypothesis

Let us note now the third crucial fact: the “polysemy” of *what* contrasts with the fact that other bare *wh*-phrases do not similarly exhibit different readings. Thus, in German, neither *wer* ‘who’ nor *wann* ‘when’ or *wo* ‘where’, to take just some examples, have more than one reading.

Let us adopt the empirical hypothesis that this is generally the case (and not only in Pagotto, French, and German). There must be, then, a general reason excluding the kind of polysemy found with *what* in the case of the other *wh*-phrases. The reason seems to be that the “lexical” restrictions [+human], [+time], [+place], etc., are incompatible with other readings, being too specific. For example, it seems intuitively obvious that the lexical item *chi* / *qui* / *wer*, bearing the feature [+human], cannot express a meaning close to ‘why’, or to ‘where’ or ‘how’, to mention just these.

Given our rejection of the hypothesis of unrelated homophones, there are two basic possibilities to consider. The lexical restriction of *what* might be uniform for all types of use, that is, compatible with all readings (and correspondingly poor in content). Alternatively, the feature specification of *what* might optionally undergo a “weakening”, source of the nonargumental readings. Since weakening does not occur with the other *wh*-phrases, we are led in either case to assume a significant difference in the type of relevant feature(s) characterizing *what*.

We are led to the conclusion, then, that the “polysemy” of *what* is crucially linked to the type of semantic specification it bears, as well as to its syntactic features. Its initial inherent specification must be poorer than that of the other bare *wh*-phrases; we therefore assume that *cossa*/*que*/*was* are underspecified in semantic (and possibly syntactic) features.
6.3. Deficient vs. nondeficient WHAT

So far the discussion in this section has been rather programmatic; we are not in a position, at present, to make the assumed poorer semantic status of WHAT explicit. Let us instead concentrate on certain syntactic properties related to the different uses of WHAT that are relevant to the unity hypothesis. Earlier we considered the fundamental distributional asymmetry that is at the origin of this article, namely that between *che* and *cossa* in terms of their respective positions in the sentence, and formulated it in terms of functional sentence structure in section 5. Here we will be concerned with properties involving the internal structure of WHAT. While these properties are directly relevant to the syntax of *que*, *cossa* and *was*, it is likely that they will also turn out to be crucial for the understanding of their semantic values.

In certain types of syntactic environments distributional asymmetries appear between the different instances of WHAT. Let us consider German, where a certain number of contrasts between noncanonical uses of *was* and standard interrogative *was* are pointed out in d’Avis (1996). In the light of Cardinaletti and Starke’s (1994) work, the examples which follow, in part inspired by d’Avis’s, can be taken to reveal differences relating to the completeness or incompleteness of the internal structure of their *wh*-phrases.

Let us begin by examining the behavior of standard interrogative *was* in different constructions, namely, (a) under coordination, (b) as contrastive focus, (c) in isolation. We consider the different constructions in turn.

Standard interrogative *was* can appear as a member of a coordinated structure, as shown in (40); it is similar in this respect to other interrogative *wh*-phrases, including nonargumental ones like *warum* ‘why’ (cf. (41)):

(40) Wer oder was hat diese Ereignisse ausgelöst?
‘Who or what caused these events?’

(41) Wann und warum hast du mit Max gesprochen?
‘When and why did you talk to Max?’

Standard interrogative *was* can be contrastive focus, as in (42), like other interrogative *wh*-phrases, including *warum* (cf. (43)):

(42) Ich habe nicht gesagt: WER macht diesen Krach, sondern: WAS macht diesen Krach.
‘I did not say, WHO makes this noise, but: WHAT makes this noise.’

‘I did not say, WHEN did you talk to him, but: WHY did you talk to him.’
Finally, standard interrogative was, like other interrogative wh- phrases including warum, can appear in isolation, forming a truncated question:

(44) Sie schreiben also? Was?  
you write, then what  
‘You are a writer, then? What do you write?’

(45) Sie haben das gefunden? Wo?  
‘You have found that? Where?’

In the three constructions, standard interrogative was behaves like other interrogative wh-phrases. The picture is quite different in the case of the nonargumental uses of was, which we now turn to. ‘Why’-like was and exclamative ‘how much’-like was contrast with standard interrogative was (and other wh-phrases) under coordination, as shown in (46)-(47):27

(46) *Was und seit wann schreit der denn so?  
‘Why and since when does he shout like this?’

(47) *Was und wie lange der schon wieder schreit!  
‘How much and for how long he has been shouting again!’

‘Why’-like was and exclamative ‘how much’-like was are also unable to function as contrastive focus (see (48)-(49)), contrary to standard interrogative was and other wh-phrases:

(48) *Ich habe nicht gesagt: Seit WANN schreit der denn so, sondern: WAS schreit der denn so.  
‘I did not say, since WHEN has he been shouting like this, but: WHY has he been shouting like this.’

(49) *Es ist unglaublich, WAS der schreit, nicht WIELANGE der schon schreit.  
‘It is unbelievable HOW he is shouting, not FOR HOW LONG he has been shouting.’

Finally, ‘why’-like was cannot appear in isolation, as a truncated question (see (50a)); notice that its quasi-synonym warum, in contrast, can function this way, with or without the modal “licenser” denn (see (50b)). As for ‘how much’-like was, there are no analogous truncated exclamatives; we replace this type by the “afterthought construction” shown in (51):

(50a) Jetzt lachst du wieder so blöd. Warum (denn)?  
b. *Was (denn)?  
‘Now you are again laughing so stupidly. Why?’
Er schreit schon wieder, und wie!

*was!

‘He is shouting again, and how!’

These contrasts between standard interrogative was, on the one hand, and ‘why’-like was and exclamative ‘how much’ was, on the other, are strikingly parallel to the contrasts between the so-called strong and defective elements (among which, most prominently, personal pronouns) investigated by Cardinaletti and Starke (1994), and strongly suggest parallel deficiencies (in terms of the absence of certain maximal projections in the structure of the deficient wh-phrases).

For reasons of space, we limit ourselves to the German paradigm (for the Pagotto and French paradigms, the reader is referred to Munaro and Obenauer 1999). We have chosen to illustrate the contrast between the argumental and nonargumental uses of what in German because here the paradigm is the most straightforward one; the Pagotto and French paradigms exhibit certain idiosyncrasies discussed in Munaro and Obenauer 1999, concerning in particular the relation between que and quoi and the fact that argumental what may occur in deficient forms. The comparison of the three paradigms can be summarized as follows.

On the descriptive level, there are two findings. First, the argumental instances of what behave in part as strong elements (was, cossa, quoi) and in part as deficient elements (que). This is, in fact, not unexpected given that in general, other argumental elements - pronouns - can also have either status. Second, the nonargumental instances of what (was, cossa, que), in contrast to the variable status of the argumental ones, are uniformly weak. This uniformity could be accidental, in which case it would have no particular significance. However, though the result concerns only three languages, we will assume that it is not due to chance.

If so, it might be thought that the obligatory deficiency is related to nonargumenthood. This idea seems to be untenable: the deficient nonargumental instances of what have close semantic counterparts that do not share their deficient status. Thus, the “specialized” interrogative wh-phrases warum / parché / pourquoi as well as exclamative wie / Pagotto come are strong; only French comme shows the behaviour of a deficient element. We conclude that there is no independent semantic reason imposing the deficient status of these elements. The fact that all six instances of nonargumental what in the three languages are deficient is significant and calls for explanation.

We assume, then, that the obligatorily deficient status of ‘why’-like what and exclamative degree what is crucially linked to the fact that these elements are instances of what, rather than independent homophones. More precisely, the particular relation between these elements and argumental what must be such that nonargumental what is necessarily deficient. Let us therefore conclude, in the spirit of Cardinaletti and Starke (1994), that the
deficient forms of WHAT are impoverished with respect to the strong forms, in that one or more projections are missing in their structure.\textsuperscript{30}

We cannot yet identify the missing piece of structure, but specify its relevant properties. It must be linked to the expression of argumenthood, and contain the semantic restriction ([+object], as suggested above). Nonargumental WHAT, then, can only be deficient, in contrast to how and why (and their counterparts): syntactically in that it lacks structure, and semantically in that it lacks a restriction.\textsuperscript{31, 32} Contrary to Cardinaletti and Starke’s analysis of pronouns, we do not take a stand concerning the functional character of the missing projection(s). Recall that this particular instance of structural deficiency is unique in the wh-paradigm, in that we do not find other cases of different meanings associated with one and the same wh-phrase, an exception related to the fact that [+object] is the unmarked restriction.

To summarize, the uniformly deficient status of nonargumental WHAT in the three languages is an argument in favour of the unity hypothesis for WHAT. The observed “polysemy” is linked to the unmarked restriction of argumental WHAT; this underspecification can give rise to a stronger deficiency, structural and semantic, which underlies nonargumental WHAT. We assume that the deficient elements remain wh-words, that is, they keep their wh-feature (as suggested by their morphology), a precondition for being able to join the landing sites identified in section 5. As assumed there, nonargumental cossa / que / was get their interpretation as a function of the particular host projection, ExclP or AttP.\textsuperscript{33}

7. Concluding remarks

In this paper we have tried to provide an account for the crosslinguistically attested option of a semantic widening which makes the wh-item WHAT compatible with a specific range of interpretations.

We have proposed that the polysemy of WHAT derives from its initially unmarked semantic specification, in comparison with the other bare wh-phrases.

Our account is crucially based on the data of Pagotto, a North-Eastern Italian dialect exhibiting overtly a distinction which we assume to be covertly present in French and German, namely that reflecting the division of labor between wh-elements that appear in different positions in the left periphery. In Pagotto this distinction is realized both morphologically and syntactically: there are two different forms, surfacing in different positions. The clear distributional asymmetry between the two wh-items reveals the opposition between two major types of uses of WHAT; in main contexts the division of labor is characterized as follows: the standard interrogative argumental values are expressed by che, appearing in sentence internal position, while the nonstandard values (argumental and nonargumental) are expressed by cossa, appearing in sentence initial position. The distinction
opposes the standard interrogative interpretation, intended as genuine request for information, to several other types, gathered together under the label *pseudo*-interrogatives.

The syntactic reflex of this distinction is the appearance of standard interrogative *wh*-phrases (such as *che*) in the lower CP-domain, as compared to higher sites determined by the functional projections relevant for the “noncanonical” uses of WHAT. We have suggested that the striking distributional difference between *was* and *que*, always sentence initial, on the one hand, and *che/cossa*, on the other, reduce to the simple interaction between the landing site requirements and the possibility for *che* to occupy a low CP-position.

Concerning the non-standard readings of WHAT, we have argued for the existence, within the CP-layer of the sentence structure, of a functional projection *Att(itude)*P; this projection can be activated by filling the specifier position with the *wh*-elements *cossa/que/was*, which results in expressing the speaker’s attitude towards the propositional content expressed.

Finally, the comparison of the three languages examined also revealed that the nonargumental instances of WHAT are uniformly structurally deficient (and correspondingly impoverished in their syntactic and semantic features), in contrast to the variable status of the argumental ones.

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1This article develops and updates some central aspects of common earlier work published as Munaro and Obenauer (1999). The work reported here was presented at the XXVI Incontro di Grammatica Generativa (Rome, March 2000) and at the X Coloquio de Gramatica Generativa (Alcalà, April 2000). We thank these audiences as well as Jean-Claude Anscombe, Josef Bayer, Paola Benincà, Jean-François Bourdin, Cassian Braconnier, and Guglielmo Cinque for their comments and suggestions on different topics. The usual disclaimers apply. Although the whole paper is a joint enterprise, for administrative reasons in Italy Nicola Munaro takes responsibility for sections 2, 5, 7, and Hans-Georg Obenauer for sections 1, 3, 4, 6.

2Research on this work was carried out as part of the Conjoined research project No. 5337/8528 CNRS-CNR “Minimal elements of linguistic variation”.

3WHAT can refer to situations and events, that is, its potential values can have propositional content (like in What does he want? To be left alone.). It is interesting to note that there exist languages where this type of WHAT has a form that differs from the one corresponding to inanimate objects (see Dayal (1996, 82f) for examples from Walpiri). We will not be concerned here with such finer distinctions.

4Throughout this article, we are exclusively concerned with bare WHAT. Obviously, the relation between (the analogues of) what and what N(P) (like, for example, German was für ein Buch) will have to figure in a larger comparative study of WHAT.

5The first class is represented by complex wh-phrases consisting of the wh-modifiers che-quant followed by a nominal element, that is, a phonetically realized nominal head: wh-phrases belonging to this class always appear in initial position; the second class of wh-phrases comprises the wh-elements qual and quant when used pronominally, that is not followed by a phonetically realized nominal head: they can appear either in initial position or in situ; the third class of wh-phrases is represented by bare wh-elements, both (pro)nominal, like chi and che, and adverbial, like comé and andé: wh-elements belonging to this class occur invariably in sentence internal position. For the details of a formal account of this distributional pattern we refer the reader to Munaro (1997), who poses a requirement on the identification of the (nominal) head of the wh-phrase.

6This hypothesis gains empirical support from a diachronic perspective. As discussed in Munaro (1998a), cossa originated as a nominal element meaning thing; its nominal use, attested from the 16th century, starts to decline...
in the course of the 18th century, when, correspondingly, one finds the first instances of cossa functioning as wh-operator meaning what; as it fully developed into a wh-item, eventually, it widened at the same time its semantic properties, as shown by the existence of some occurrences of cossa in the particular usages analyzed in section 2.2.1. In the light the diachronic development just outlined, Munaro (1998a) attributes the shift from the nominal use to the use as wh-operator to the raising of cossa from the N° position up to the D° position.

Similarly, an example like (i) can only be used by the speaker to express the fact that, despite his efforts, he does not manage to remember the name of the person referred to:

(i) Cossa se ciàme-lo (che) ?
   what himself calls-cl (what)
   ‘What’s his name ?’

Note that both in (3-5) and in (i) the wh-element che can optionally appear in sentence internal position. Interestingly, by adding a sentential negation in (3), yielding (ii), we get the reading in which the speaker expresses the opinion that the subject is doing every kind of (unexpected) things:

(ii) Cossa no sé-tu drio magnar?!?
   what not-are-cl behind eat
   ‘What things you are eating?!’

On the particular “scalar implicature effect” induced by the presence of a negative marker in this kind of constructions see Portner and Zanuttini (1996).

With transitive verbs however, if there is no direct object expressed, as in (i), the sentence is sharply deviant in the relevant reading (although it is perfectly acceptable in the argumental reading analogous to that of (3)):

(i) ??Cossa magni-tu (che) ?!
   what eat-cl (what)
   ‘Why are you eating?!’

As shown by (ii), the structure is still marginal if the direct object is overtly realized:

(ii) ?Cossa compro-tu n’altro giornal ?!
   what buy-cl another newspaper
   ‘Why are you buying another newspaper?!’

This is probably due to a violation of the theta-criterion, as the (mono-)transitivity of the verb is not compatible with two potential arguments (that is cossa and the object DP).

Another predicate which can improve the degree of grammaticality of such structures is ocorn (‘need’) (even with verbs which are normally not compatible with this particular reading of cossa, like for example copular verbs in predicative constructions), as exemplified in (i):

(i) Cossa ocorr-lo comprar /che te-compre n’altro giornal (par far che) ?!
   what needs-cl buy / that cl-buy another newspaper (for do what)
   ‘There is no need (for you) to buy another newspaper’

As noted in footnote 6, in (8) the wh-element che in sentence internal position can be omitted; it is noteworthy that if the sentence initial wh-item cossa is omitted, the resulting structure is interpreted as a real question:

(i) Coste-lo che?
costs-cl what
‘How much does it cost?’

In (i), like in (10), che corresponds to an amount expression and realizes an argument obligatorily selected by the predicate; it seems then that even the wh-item che can, to a limited extent, widen its basic semantic contribution, but, differently from cossa, it is always associated with an interpretation of the sentence as a real interrogative through which the speaker intends to acquire information previously not available to him.

10 With the same restricted class of verbs cossa can be used in genuine wh-interrogatives to question the measure phrase selected by the predicate:

(i)a. Cossa coste-lo (‘che)?
    b. Cossa péze-lo (‘che)?
    what costs-cl (*what)
    what weigh-cl (*what)

‘How much does it cost?’
‘How much does it weigh?’

Interestingly, in this case cossa is incompatible with the wh-item che in sentence internal position.

11 There is a further instance of cossa that is worth pointing out, namely the parenthetical use attested in sentences like the following:

(i) Me fradèl, cossa u-tu, no’ l vede mai
    my brother, what want-cl, not him see never

‘As for my brother, you know, I never see him’

Here cossa introduces the by now frozen parenthetical expression cossa utu, used in contexts where the speaker wants to provide a plausible explanation or a justification for a certain, usually unpleasant or unfortunate, situation or attitude.

All the particular readings analyzed in this section are also available for the corresponding wh-elements in other Northern Italian dialects (such as Paduan cossa; see on this Munaro & Obenauer (1999)).

12 The possibility for cossa to function as a real interrogative word seems to be tied to its being embedded under an appropriate predicate, like in (ia); this possibility is also available in infinitival contexts, as shown by (ib):

(i)a. No so cossa che i fa (‘che).
    not know what that cl-do (*what)

    ‘I don’t know what they do.’

(i)b. No so cossa far (‘che).
    not know what do (*what)

    ‘I don’t know what to do.’

Note that in these cases, differently from what happens in main pseudo-questions, the wh-item che cannot appear in sentence internal position.

13 Only when the main predicate is replaced by a periphrastic expression with the verb go is the sentence fully grammatical, as shown by (ia); (ib) shows that rephrasing of the embedded verb is in itself not sufficient to save the structure and that grammaticality can be achieved through the additional realization of che in situ:

(i)a. Cossa va-tu a pensar che i sia drio far barufa (che)?!
    what go-cl to think that cl-be behind do quarrel (what)

b. Cossa pensi-tu che i sia ‘ndädi a far barufa ?(che)?
    what think –cl that cl-be gone to do quarrel (what)

‘There is no reason for you to think that they are quarrelling’
However, independently of the position occupied by the licensing elements, both in (ia) and in (ib) *cossa* can only be construed with the matrix verb; hence, *why*-like *cossa* can only be interpreted with the matrix predicate and under the condition that some licensing element (be it a modal-like predicate or the *wh*-item *che*) be present.  

For studies of the relation between *que* and *quoi*, realized in earlier generative frameworks, see Obenauer (1976), Bouchard and Hirschbühl (1987). See Obenauer (1981) for an analysis of the interrogative construction using *est-ce que*, and Obenauer (1977) for discussion of exclamative *que* and *qu’est-ce que*. See Milner (1978, chap. 7) for numerous aspects concerning exclamative *que*.

There also exists the frozen expression *que veux-tu* / *qu’est-ce que tu veux* without a sentential complement, meaning (approximately) ‘It’s like that’ (‘parenthetical’ *que veux-tu*). This use is analogous to that of Pagotto *u-tu* mentioned in footnote 11.

(i)a. *Que veux-tu, il a toujours été paresseux.*  
    b. *Qu’est-ce que tu veux, il a toujours été paresseux.*  
      ‘It’s like that / there is nothing one can do, he has always been lazy.’

The role of this element in contributing to the “licensing” of *que* here is reminiscent of the role of the particle *denn* in German analogues with *was* (cf. (i)); see below, section 6.

(i)  
    *[Was lachst du *(denn)*?*]  
    ‘Why are you laughing?’

The element *ne* might play a similar role (see the examples in the following text).

Contrary to the case of argumental *que* - both in true questions and in pseudo-questions -  ‘*why*-like *que* cannot alternate with *qu’est-ce que*, for reasons yet unclear.

(i)a.  
    *Qu’est-ce que vous tardez?*  
    b. *Qu’est-ce qu’il n’écrit (pas) en prose?*

Martinon seems to accept all these examples alike. In contemporary French, exclamative *que* has, with verbs, a literary flavour and is subject to certain restrictions, contrary to its use with adjectives and adverbs. We leave this aspect aside.

In other words, under this approach there is no more contrast, with respect to overt (as opposed to covert) movement, between *che* and *cossa* in Bellunese and between *que* and *quoi* in French; any attempt to connect interpretation with syntactic structure will thus have to refer crucially to the specific landing site of the *wh*-element and not to the fact that the element moves *per se*.

For evidence in favor of the hypothesis that *wh*-phrases occupy a higher structural position in main exclamatives than in main interrogatives see also Benincà (1995). We exclude the possibility that the *wh*-item occupies a specifier position even higher than the one occupied by *wh*-items in exclamatives on the basis of the fact that the contexts we consider here always exhibit inversion between the inflected verb and the subject clitic pronoun, which is traditionally taken to be a morpho-syntactic mark of ‘interrogativity’; that such a feature must be somehow available in these cases is shown by the fact that non-standard questions can, although they need not, be answered.

This projection was termed *Ev(aluative)CP* in Munaro and Obenauer (1999), a less appropriate label, as we believe today. For different uses of *EvP* (without *C*), see Cinque (1999) and Ambar (1999; 2000).
With this assumption, we follow Cinque (1999) and exploit his proposal that each semantically relevant functional head can be specified either for an unmarked or for a marked value, triggering a default or a non-default interpretation, respectively.

As shown by example (7c) and by those reported in footnote 13, this particular reading is sometimes made possible by the insertion of modal-like verbs such as want, need or go, which, under this approach, might be analyzed as occupying the head Att°; indeed, the presence of these predicates seems to be able to determine the same kind of reading even with other wh-words (but see Munaro (1998b) for the availability of a non genuine interrogative interpretation in structures containing bare wh-phrases in sentence initial position):

(i).a. U-tu che ‘l sia ‘ndât andé?!
    want-cl that cl-be gone where
    ‘You need not ask where he has gone!’
b. Va-lo a invidar chi?!
    goes-cl to invite whom
    ‘Whom (on earth) does he invite?!’

By uttering (ia) the speaker intends to point out the silliness of the addressee’s question, meaning that there can be no doubt about the place referred to; similarly, (ib) expresses the speaker’s disapproval concerning the invitation of a specific person.

We surmise that a similar role might be played by negation in the French examples analyzed above as well as by the modal particle denn in German. As for the unavailability of the non-standard readings in embedded questions we speculate that this might be seen as the effect of the selectional properties of the matrix predicate (to the best of our knowledge, there seems to be no matrix predicate compatible with such readings); given the intrinsic feature deficiency of these wh-items, selectional properties would suffice to determine the genuine interrogative interpretation.

Indeed, basic data from a certain number of languages show that only degree is, in the unmarked case, a possible restriction for exclamative quantification (Elliott (1974), (Grimshaw (1977), Obenauer (1994)):

(i).a. How tall Jim is!
b. How much he loves her!

(ii).a. *?Who Jim met!
b. *?Where he found it!

Of course, once we have identified a possible position for cossa/que/was, the natural question arises as to whether these elements are (first-)merged there or raise from some clause-internal argumental position. Empirically, there are some data supporting the first alternative; one relevant piece of evidence is the fact that the particular reproachful interpretation usually associated with cossa is apparently not available when it is inside a prepositional phrase; a second argument for the base generation of cossa in sentence initial position comes from the data reported above concerning its (un)interpretability with an embedded predicate (cf. (12)): as we have seen, cossa can never be construed with the predicate of the embedded sentence, unless some licensing element (usually che) is inserted; this state of affairs would be completely unexpected if cossa were generated in an argumental position inside the embedded clause moving then to the specifier of some CP-projection of the
matrix clause; on the contrary, the hypothesis of its merging in a left-periphery position correctly predicts the data. Furthermore, from the conceptual point of view, one can appeal to the by now well-founded theory-internal assumption that, everything else being equal, the operation Merge is less costly than Move.

However, under this analysis an obvious problem is posed by sentences with a transitive predicate containing argumental cossa without che in sentence internal position, as it is not immediately clear how the verb can discharge its internal thematic role; considering these cases, we propose that the strategy of (first-)merging the wh-item directly in ([Spec,Op] with subsequent raising to) [Spec,AttP] is limited to sentences with a why-like reading (as well as to the cases in which cossa is doubled by che, which is the element that satisfies the argumental requirements of the verb); as for non-standard questions containing only argumental WHAT we assume base generation of the wh-item in an argumental position and raising to [Spec,AttP], thereby activating the feature associated with the corresponding head and inducing the particular implication discussed above.

A clearer case of ordinary wh-movement from a thematic position is probably represented by the quantificational reading exemplified in (10) and in footnote 10; this is the only case in which the sentence can receive a standard interrogative interpretation (and where che cannot appear in situ in cooccurrence with cossa); this case is also exceptional insofar as it this is the only use of cossa that seems to be restricted to a very limited class of verbs (like cost, weigh, measure) characterized by the same argumental requirements; these two facts strongly suggest that in this case cossa is generated in an argumental position and undergoes ordinary wh-movement to [Spec,IntForceP] or, alternatively, to [Spec,ExclP] producing (10).

As for the exclamative usage exemplified in (9), as anticipated in the main text, given that there is no restriction as to the type of predicate involved in this structure and no interpretive implication concerning the speaker’s attitude, this example may well be analyzed as a case of (first-)merge of cossa in [Spec,ExclP] (cf. Corver (1990, ch. 5.4) on “base generation” in [Spec,CP] for split exclamative wat in Dutch).

The unity hypothesis presupposes, of course, that these readings are present more generally in other languages than the ones we consider here, an empirical hypothesis we explicitly make and hope to establish more strongly in the future.

The environments (a) and (b) are used in d’Avis (1996) for distinguishing standard interrogative was from the two nonargumental was; see also note 28. We add environment (c) to this list.

Argumental exclamative wh-phrases share the properties of argumental interrogatives; see Munaro and Obenauer (1999).

D’Avis also points out contrasts involving multiple wh-questions with ‘why’-like was. However, with the appropriate surprise interpretation (and intonation), in the presence of denn, this type of structure seems to Obenauer to be independently excluded even with standard question words; see Munaro and Obenauer (1999).

Deficient elements, according to Cardinaletti and Starke, must appear in certain types of positions in order to “make up” for their missing structure/features. It suffices here to note that these positional requirements cannot be met in the diagnostic environments utilized above, which accounts for the observed contrasts.

D’Avis (1996) also adopts a sort of “deficiency hypothesis” for nonargumental German was, considering these types of use as “expletive”.

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25The unity hypothesis presupposes, of course, that these readings are present more generally in other languages than the ones we consider here, an empirical hypothesis we explicitly make and hope to establish more strongly in the future.

26The environments (a) and (b) are used in d’Avis (1996) for distinguishing standard interrogative was from the two nonargumental was; see also note 28. We add environment (c) to this list.

27Argumental exclamative wh-phrases share the properties of argumental interrogatives; see Munaro and Obenauer (1999).

28D’Avis also points out contrasts involving multiple wh-questions with ‘why’-like was. However, with the appropriate surprise interpretation (and intonation), in the presence of denn, this type of structure seems to Obenauer to be independently excluded even with standard question words; see Munaro and Obenauer (1999).

29Deficient elements, according to Cardinaletti and Starke, must appear in certain types of positions in order to “make up” for their missing structure/features. It suffices here to note that these positional requirements cannot be met in the diagnostic environments utilized above, which accounts for the observed contrasts.

30D’Avis (1996) also adopts a sort of “deficiency hypothesis” for nonargumental German was, considering these types of use as “expletive”.
As is well-known, this term is often applied, in German, to another instance of was, attributing to it a radical semantic deficiency; cf. (i), where was is also termed “scope marker”:

(i)   Was glaubst du, wo er wohnt?

what believe you where he lives

‘Where do you believe (that) he lives?’

The analysis of this construction (and similar ones in other languages) has been much debated again in recent years; see Dayal (1996), Horvath (1997), and the articles in Lutz and Müller (1996) for diverging analyses and further references.

31 A radically deficient status of Dutch wat ‘what’ in semantic respects is assumed in Postma (1995) and in Bennis (1995), where different instances of wat, corresponding in part to the types of use considered here, are examined. Both authors analyze wat uniformly as a sort of empty quantifier whose different interpretations are not determined by lexical properties, but by the varying configuration binder-trace. While there is a certain similarity - regarding the assumption of a form of deficiency - with our approach to cosa/que/was, it seems to us that the contrast between argumental and nonargumental WHAT that is strongly suggested by the diagnostic environments examined in (40)-(51) points to the presence of morphological structure (and corresponding semantic structure) in argumental WHAT that is in contradiction with the “strong” unity hypothesis argued for by Postma and Bennis, as compared to the “weaker” one we have adopted.

32 As for argumental deficient WHAT (for example, French que), it exhibits a structurally different type of deficiency, compatible with argumenthood, as in the case of deficient pronouns.

33 Assuming that “surprise/disapproval was” raises to [Spec,AttP] the same way as cosa (see above), the null hypothesis, the German data in (30) and (32) lead to the conclusion that this raising is insufficient in itself to license was and that it must be supplemented by another process, namely, expression of modality (recall the remarks above concerning the parallel role of donc and ne in French; on denn and “modal particles”, see Bayer (1991), König (1977), and the articles in Weydt (1977)). Such a requirement does not seem to be an isolated case; cf. Obenauer and Poletto (to appear) concerning the expression of modality, through elements in IP, in Italian and German rhetorical questions. For a number of observations on was, see Munaro and Obenauer (1999, section 7). As for the question why Pagotto can - in a number of cases - dispense with the presence of such elements, we leave it for future research.