


Article

# Towards a Typology of *wh*-Doubling in Northern Italian Dialects

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**Abstract:** In this work we examine the distribution of *wh*-in-situ and short (i.e., clause internal) *wh*-doubling in Northern Italian dialects with the purpose of showing that *wh*-in-situ and *wh*-doubling are not unitary phenomena, since they are subject to different distributional properties across dialects. We show that *wh*-doubling cannot be reduced to a single analysis but rather corresponds to a family of phenomena which have in common the basic procedure of feature doubling, within which the copying mechanism applies to different subsets or packages of features and is constrained in different ways. Furthermore, some types of doubling correspond in their distribution with some types of *wh*-in-situ, which shows that the two phenomena must be related and that different types of *wh*-in-situ are the null counterpart of different types of *wh*-doubling. However, in the languages in which *wh*-in-situ is generalized, *wh*-in-situ has nothing to do with *wh*-doubling.

**Keywords:** *wh*-in situ; *wh*-doubling; left periphery; feature copying; Northern Italian dialects

## 1. Introduction

The aim of this article is rather minimal, i.e., we intend to show that in Romance neither *wh*-in-situ nor *wh*-doubling are a unitary phenomenon which can be reduced to a single theoretical analysis. If we consider genetically unrelated languages like, for instance, Chinese and French, it can be shown that the distribution and the properties of *wh*-in-situ are different, since it has been argued that they are subject to a main versus embedded asymmetry in colloquial French, which is not attested in Chinese. In this work, we intend to show that this is the case also in the micro-variation domain of the Northern Italian dialects (NIDs) and that there is a need for a modularized theory according to which different factors play a role, all contributing to the general picture of *wh*-in-situ, which appears to be quite varied. Almost all contributions on *wh*-in-situ in Romance (mainly on French, but also on the NIDs), i.e., those that see *wh*-in-situ as really in situ (cf. Cheng and Rooryck 2000) and those that treat it as resulting from hidden clausal or vP movement (cf. Munaro et al. 2001), have one assumption in common, namely that there is a connection between the *wh*-in-situ with a null operator in the CP layer. This means that, at least implicitly, most literature has entertained the idea that *wh*-in-situ can be treated as a form of “covert” *wh*-doubling where one of the two doubled forms remains un-spelled. In turn, “optional” in-situ-ness alternating with overt *wh*-doubling reported in the literature (cf. Poletto and Pollock 2009 among others) can be treated as equivalent in theoretical terms (but see for example Chang 1997 for intervention effects triggered by *wh*-in-situ), the only difference being that the higher doubled form is spelled-out or not. In turn, both *wh*-in-situ and *wh*-doubling are cases in which not all the features of the *wh*-item are pied-piped to the CP domain, since, as we will see in the majority of the NIDs, the higher form is not identical to the lower one. However, this is only true for those languages in which *wh*-in-situ does alternate with *wh*-doubling.



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We provide evidence for this view, i.e., that at least in some dialects *wh*-in-situ and *wh*-clitic doubling are two sides of the same coin. This means that in those languages that have both structures, we can study the properties of the null operator in the CP layer by examining its spelled-out counterpart, i.e., *wh*-doubling. Our main claim is that there are different types of *wh*-in-situ, as there are different types of *wh*-doubling, depending on the features that the higher element possesses and on the type of *wh*-item doubled. The empirical domain we investigate is a set of NIDs which display so-called “short *wh*-doubling”, i.e., doubling within the same clause (which is not very frequent in the Germanic domain). If not otherwise indicated, the examples we present are taken from the database collected within the ASIIt project, which aims at the elaboration of a syntactic atlas of the Italo-Romance dialects.<sup>1</sup>

In the NIDs, we can distinguish the three types of *wh*-doubling in (1) on the basis of the following two factors:

- a. the *wh*-items that can be doubled;
- b. the form of the two doubled forms.

As exemplified in (1), the higher doubled form can be a clitic form of the lower one, as in (1a), it can be a weak form<sup>2</sup>, as in (1b), or, as in (1c), a form of ‘what’:

- |     |    |  |                              |
|-----|----|--|------------------------------|
| (1) | a. | <i>S'a-lo fat che?</i><br>what-has-he done what<br>'What has he done?'                         | Illasi (Western Veneto)      |
|     | b. | <i>Cuma ta l'è cùsinaa cumè?</i><br>how you it have cooked how<br>'How did you cook it?'       | Mendrisio (Northern Lombard) |
|     | c. | <i>Cossa inviti-to chi?!</i><br>COSSA invite-you who(m)<br>'Who (the hell) are you inviting?!' | Padua (Central Veneto)       |

We define clitic/weak *wh*-doubling as cases where a clitic/weak form occurs at the beginning of the clause and a tonic form of the same *wh*-element occurs at the end of the clause, as is the case in (1a) and (1b), respectively. These examples show that doubling is not a homogeneous phenomenon considering the form of the sentence's initial *wh*-item. In general, all doubling strategies are sensitive to the type of *wh*-item, i.e., they are only compatible with a subset of *wh*-items, but the set of *wh*-items targeted by the different types may be different. The first step of the argumentation will be to show that in the dialects that display both, *wh*-in-situ and *wh*-doubling are subject to the same restrictions, while the second step will be to sort out the different types.

Before starting our survey, we need to define the empirical domain of our investigation; in this article we only examine cases of short doubling, that is, doubling within a simple main interrogative clause. We disregard both cases of long extraction from a complement clause (similar to those reported for the Germanic languages) and cases of doubling within embedded interrogatives, since they are subject to different restrictions and therefore obey descriptive generalizations which don't match the ones relevant for main contexts that we discuss here.

The paper is organized as follows: in Section 2 we provide three arguments showing that there is a symmetry in the distribution of *wh*-in-situ and *wh*-doubling; in Section 3 we analyze different types of *wh*-doubling, namely weak *wh*-doubling and operator *wh*-doubling; in Section 4 we take into account a less restrictive pattern in the distribution of *wh*-elements and sketch a first view of how doubling of interrogative elements could be analyzed; in Section 5 we confute some potential counterarguments to our view; Section 6 summarizes the main findings and offers some theoretical conclusions and perspectives for future research.

## 2. Arguments That *wh*-In-Situ and *wh*-Doubling Are the Same Phenomenon

In this section we first provide an idea of how doubling can be syntactically analyzed and then present a set of arguments that show that *wh*-in-situ and *wh*-doubling are indeed

one and the same phenomenon, since they behave alike in the dialects that have both. We agree with Barbiers (2008) that doubling is not a unitary phenomenon across languages. The analyses proposed in the literature on this phenomenon and summarized in Barbiers (2008) are fundamentally three: the first one sees doubling as multiple spell out of several positions located in the same chain; the second analysis sees doubling as splitting of a big constituent originally containing the two “doublees”, which then move to different positions according to their feature endowment; the third sees doubling as an agreement phenomenon, i.e., a process of copy of some or all features. As such doubling can be partial (when the two forms of the doubled forms differ) or total (when the two doubled forms are identical). Actually, what is interesting for the interpretation of *wh*-doubling in the NIDs is whether the two doubled forms have some (or all) features in common or whether they split the features between the two forms. In those dialects where the interpretation of *wh*-doubling is identical to the interpretation of a non-doubled form, then we have cases of copying of features. In those dialects where doubling has a semantic import, we have cases of splitting, so that the second form adds a feature to the *wh*-item feature endowment. Hence, doubling can be modularized in terms of copying of features or splitting of features and in terms of how many features are split/copied. The necessity of having a flexible analysis of doubling is due to the fact that doubling is not a unitary phenomenon, as the literature also attests (see again Barbiers 2008 for a summary of the problems).

### 2.1. First Argument: Distribution within a Single Dialect

The first argument has to do with the distribution of the two phenomena in single dialects. There are several dialects where *wh*-in-situ and *wh*-doubling are both grammatical and alternate with apparently no semantic distinction; this is the case for example of Monnese, a dialect spoken in North-Eastern Lombardy (cf. Munaro 1999; Benincà and Poletto 2004):

- |     |    |   |                               |
|-----|----|---|-------------------------------|
| (2) | a. | <i>Ch'et fat (què)?</i><br>what have-you done what<br>'What have you done?'   | Monno (North-Eastern Lombard) |
|     | b. | <i>Ngo fet majà (ngont)?</i><br>where do-you eat where<br>'Where do you eat?' |                               |
| (3) | a. | <i>Fet fà què?</i><br>do-you do what<br>'What are you doing?'                 | Monno (North-Eastern Lombard) |
|     | b. | <i>Fet majà ngont?</i><br>do-you eat where<br>'Where do you eat?'             |                               |

This suggests rather strongly that *wh*-in situ and clitic *wh*-doubling are connected. A simple way to capture this correlation would be to assume that *wh*-in situ is a form of clitic *wh*-doubling where the clitic form is null, i.e., the null form is dragged to the left periphery alongside with the verbal complex, as the overt clitic form is. If we make an analogy with other, better-known types of null elements, like null subjects, this would amount to saying that some languages have the equivalent of a *pro* but also the equivalent of subject clitics, i.e., optional subject clitics, as is well known to occur in several dialects (see for instance Piedmontese /i/). Now the question becomes what determines the alternation between the two strategies. Our main claim is that this doubling is a case of copying of some features and, depending on the amount of features pied-piped to the higher position, we can have either a null or a phonetically spelled-out copy.

### 2.2. Second Argument: Same Interpretation

A further argument showing that clitic *wh*-doubling and *wh*-in situ are equivalent is that in several dialects the two strategies present exactly the same interpretation, once intonation has been controlled for. *Wh*-in situ in Romance is often limited to specific semantic contexts which are not the ones of standard questions but the ones of special

questions, either surprise/disapproval or rhetorical questions (according to the definition proposed by [Obenauer 2004, 2006](#)). That *wh*-in situ first emerges in special contexts has long been noticed for standard and colloquial French varieties; indeed, the debate whether *wh*-in-situ in French has a presuppositional reading or not has a long tradition and the research on this topic has focused on whether *wh*-in-situ can occur in extraction contexts and co-occur with negation, quantifiers and modals (see for example the work by [Chang 1997](#); [Bošković 2000](#); [Cheng and Rooryck 2000](#); [Mathieu 2004](#); [Poletto and Pollock 2009](#)).

A systematic experimental investigation would be in order; according to [Baunaz \(2011\)](#), there are most probably different varieties of French, which would explain the discrepancy in the grammaticality judgements reported in the literature. We will provisionally assume that, at least for a certain class of more conservative French speakers, *wh*-in situ triggers also in French a presuppositional interpretation, but that most varieties of French have moved forward with respect to this stage and *wh*-in situ is, at least in the common spoken variant, not subject to these restrictions.

On the other hand, the literature on the presuppositional interpretation related to *wh*-in-situ in Spanish is rather limited, but the judgements have not been questioned; the presuppositional reading has been noticed for Spanish in situ *wh*-items, which seem to quantify over heavily restricted domains, as opposed to overtly moved *wh*-phrases. [Etxepare and Uribe-Etxebarria \(2005\)](#) notice that *wh*-items in situ in Spanish have a different pragmatic property with respect to standard questions, in the sense that the interpretation of the *wh*-item is restricted through Focus and there is an event presupposition, as witnessed by the following dialogue taken from [Jiménez \(1997, p. 42\)](#):

- (4) Speaker A: Mi padre, mi madre y yo fuimos a la tienda a comprar huevos leche y café.  
'My father, my mother and I went to the store to buy eggs, milk and coffee.'  
Mi madre compró los huevos.  
'My mother bought the eggs.'
- (5) a. Speaker B: ¿Qué compró tu padre?  
what bought your father  
b. Speaker B: Y tu padre compró ¿qué?  
and your father bought what

For an in-situ question such as (5b) to be felicitous, we need a context such as (4). Afterwards, Speaker B can utter (5b), assuming that: (i) the father of Speaker A bought something; and (ii) the item bought comes from a pre-established set (the milk, eggs and coffee set). Clearly, (5a) and (5b) have different presuppositions. [Etxepare and Uribe-Etxebarria](#) provide a test to show that *wh*-in-situ in Spanish requires a presuppositional reading about the existence of a possible non-null value for the answer: if the question is preceded by an *if*-clause, then the presupposition does not exist, and actually in Spanish sentences like (6a) are banished:

- (6) a. ??Si compró algo, tu padre compró ¿qué?  
if he-bought something your father bought what  
b. Cuando compró algo, tu padre compró ¿qué?  
when he-bought something your father bought what
- (7) a. Cuando compró algo, ¿qué compró tu padre?  
when he-bought something what bought your father  
b. Si compró algo, ¿qué compró tu padre?  
if he-bought something what bought your father

Coming to the Northern Italian domain, there are dialects where *wh*-in-situ and doubling are indeed restricted to specific interpretations. We examine here the case of Paduan, where the *wh*-in-situ strategy cannot be used in standard questions, but is confined to two distinct interpretations. The first one is defined by [Munaro and Obenauer \(2002\)](#) and [Obenauer \(2004\)](#) as Surprise/Disapproval question (and in this case the presence of the sentence initial conjunction *e* 'and' is not allowed). The second interpretation is a presuppositional one, where the speaker presupposes that there is a value for the variable

in the set of answers. In this case, it is strongly preferred to add the conjunction *e* at the outset of the sentence, as shown below:<sup>3</sup>

- (8) a. Te la ghe magnà *dove*? SDQ  
you it have eaten where?  
'Where did you eat it?'  
b. E te la ghe magnà *dove*? Presuppositional  
and you it have eaten where?
- (9) a. Te ghe ghe magnà *quando*? SDQ  
you there have eaten when?  
'When did you eat there?'  
b. E te ghe ghe magnà *quando*? Presuppositional  
and you there have eaten when?
- (10) a. Te ghe magnà *cossa*? SDQ  
you have eaten what?  
'What did you eat?'  
b. E te ghe magnà *cossa*? Presuppositional  
and you have eaten what?

Obenauer (1994) splits questions into two types: standard questions, where the value of the variable is to be found inside the standard set of possible answers, and special questions, where the value of the variable is to be looked for outside the standard set of answers provided by the context. Operator<sup>4</sup> *wh*-doubling in Paduan signals the second type of questions. Interestingly, *wh*-doubling replicates the SDQ interpretation, but not the presuppositional one associated with *wh*-in-situ. Notice that the higher doubled form is the pure operator corresponding to the element which has the least possible amount of lexical information, namely *cossa* 'what':

- (11) *Cossa vardi-to cossa*?!  
COSSA look-you (at-)what  
'What (the hell) are you looking/staring at?'  
='You should not be staring at this.'
- (12) *Cossa inviti-to chi*?!  
COSSA invite-you who(m)  
'Who (the hell) are you inviting?!'  
='You should not invite that person.'
- (13) *Cossa ve-to dove*?!  
COSSA go-you where  
'Where (the hell) are you going?!'  
='You should not go there.'
- (14) *Cossa ghe ghe-to magnà quando*?  
COSSA there have-you eaten when?  
'When did you eat there?'
- (15) a. \**Cossa cori-to parcossa*?  
COSSA run-you why?  
b. \**Cossa ghe ghe-to magnà come*?  
COSSA there have-you eaten how?  
c. \**Cossa lesi-to che libro*?  
COSSA read-you which book?

As shown by the examples (11)–(13), *wh*-doubling in Paduan has an SDQ interpretation; *wh*-in-situ also does. In addition to this, *wh*-in situ can have the presuppositional interpretation identified by Etxepare & Uribe-Etxebarria, but only when *e* is present at the beginning of the clause. We will adopt here the null hypothesis, namely that, since *wh*-in-situ and *wh*-doubling have the SDQ interpretation in common, at least one type of *wh*-in situ must be a form of covert *wh*-doubling. However, the fact that *wh*-in-situ has two interpretations means that it must be of two types, depending on the null category that occupies the higher position. The type which generates the S/D reading as defined

by Obenauer (2004, 2006), must be similar to the lexically realized *cossa* ‘what’, namely a pure operator marking the scope of the interpretation. Following Munaro and Obenauer (2002), we assume that S/D questions involve an additional modal layer of the CP related to the speaker’s evaluative attitude. Hence, Paduan *wh*-in-situ generating the S/D reading must also involve this additional layer, which is occupied by a lexically realized or null pure operator marker, as put forth by Obenauer (2006). The other interpretation is just the presuppositional one, already identified on the basis of other Romance languages such as French or Spanish, and is not to be considered as a type of special question such as those identified by Obenauer (2004, 2006). It entails a presupposition that the answer must have a non-null value. We surmise that this type of reading does not involve an additional higher modal layer, and the null element occurring in the higher position is a (null) clitic version of the lower one, not a pure operator. It is a fact that doubling occurs first in so-called “marked” constructions, and this is true of doubling in general (see Barbiers 2008, p. 11). For instance, negative doubling is known to occur as a stage of the Jespersen cycle, and it starts out in pragmatically marked contexts where the speaker negates not only the truth value of the sentence, but also the addressee’s discourse implicature. Also, pronominal clitic doubling in languages like Spanish for the object, or the Northern Italian dialects for the subject, is found in contexts in which the doubled DP displays some interpretive properties like definiteness, animacy, specificity etc. Hence, we think that the reason why *wh*-in-situ in Paduan presents two distinct readings is that it can have two distinct types of null doubling elements, one corresponding to the pure operator and a null clitic form (in a sense similar to well-known categories such as subject *pro*) similar to the structures reported in French, Spanish etc. The fact that, in Paduan, this clitic form can be null boils down to a property of the lexicon of this language, just like *pro*-drop does.

### 2.3. Third Argument: Distribution across Dialects

The third argument we present demonstrates the similarity between *wh*-in-situ and *wh*-doubling on the basis of their distribution. Benincà and Poletto (2005) formulate a set of empirical generalizations showing that the set of clitic *wh*-items which enter clitic doubling is the same as *wh*-in-situ. They formulate the following pairs of generalizations in the form of implicational relations for clitic *wh*-doubling, which are assumed to be valid across the NIDs and express the distribution of clitic *wh*-doubling:

- (16) a. If only one *wh*-item behaves like a clitic it is either *what* or *where*.  
 b. If *wh*-in situ is found with a single *wh*-item, this *wh*-item corresponds to *what*.  
 c. If *wh*-doubling is found with a single *wh*-item, this *wh*-item corresponds to *what*.

These generalizations can be illustrated on the basis of various dialects.

For example, in Western Friulian dialects there is only one clitic *wh*-item, the one corresponding to the element ‘where’, as shown by Poletto (2000); unlike *dulà*, the *wh*-element *do* displays the typical properties of clitics, i.e., it cannot be coordinated, used in isolation, cannot be preceded by a preposition and cannot appear in clause internal position:

- (17) a. \**Do e quant* (a) van-u? S. Michele al Tagliamento  
 where and when (cl) go-they  
 ‘Where and when do they go?’  
 b. *Dulà?* /\**Do?*  
 ‘Where?’  
 c. *Di dulà* /\**di do* al ven-ja?  
 from where he comes-he  
 ‘Where does he come from?’  
 d. *I so-tu zut dulà?* /\**I so-tu zut do?*  
 cl are-you gone where?  
 ‘Where have you gone?’

Moreover, *do* needs to be adjacent to the inflected verb, and therefore cannot co-occur with a vocalic subject clitic and cannot introduce an embedded interrogative in co-occurrence with the complementizer:

- (18) a. \**Do a van-u?*  
 where *cl* go-they  
 'Where are they going?'  
 b. *Dulà a van-u?*  
 where *cl* go-they  
 'Where are they going?'
- (19) a. *A mi an domandat dulà ch al era zut*  
*cl* to-me have asked where that he was gone  
 'They asked me where he had gone'  
 b. \**A mi an domandat do ch al era zut*  
*cl* to-me have asked where that he was gone  
 'They asked me where he had gone'

We also provide the following data from the Veneto dialect of Illasi, where the only clitic *wh*-element is *sa* 'what':

- (20) a. \**Sa, secondo ti, fa-lo?* Illasi  
 'What, according to you, does-he?'  
 b. *Cossa, secondo ti, fa-lo?*  
 'What, according to you, does-he?'  
 c. \**Sa? Cossa?*  
 'What?'  
 d. *A cossa/\*sa pense-lo?*  
 to what thinks-he  
 'What is he thinking of?'  
 e. \**Sa o chi ha-lo visto?*  
 what or who has-he seen  
 'What or who has he seen?'  
 f. *Cossa o chi ha-lo visto?*  
 what or who has-he seen  
 'What or whom has he seen?'

To illustrate the link between the existence of *wh*-clitics, (a subtype of) *wh*-in-situ and *wh*-doubling we provide data from the Eastern Lombard dialects spoken in Val Camonica, where the only *wh*-item that can remain in situ and be doubled by a clitic form is 'what':

- (21) a. *Ch'et fat ?*  
 what have-you done  
 b. *Ch'et fat què?*  
 what have-you done what  
 c. *Et fat què?*  
 have-you done what  
 'What have you done?'

The peculiarity of the *wh*-item corresponding to 'what' is witnessed by the following examples from Borgomanerese, as noted by Tortora (2014, p. 311):

- (22) a. *Cus tal scerchi?*  
 what you-look.for  
 b. *Tal scerchi que?*  
 you-look.for what  
 c. \**Que tal scerchi?*  
 what you-look.for  
 'What are you looking for?'

- (23) a. *Cus l'è?*  
what it-is  
b. *L'è que?*  
it-is what  
c. *\*Que l'è?*  
what it-is  
'What is it?'

To represent those dialects where only the *wh*-item 'where' can be left in situ and doubled, we take the dialect of Livigno described in Galli (2017), where this *wh*-item has three forms; all of them can occur sentence initially, but only with the form *indó* is subject clitic inversion (henceforth SCLI) obligatory, as shown below:

- (24) a. *Indó va-l?*  
where goes-he?  
b. *Indóe al va?*  
where he goes?  
'Where is he going?'  
c. *Indónta vasc?*  
where go?  
'Where are you going?'

Furthermore, the form *indó* can only occur initially in the sentence, while the other two forms can also occur in situ:

- (25) a. *\*Ta vasc indó?*  
b. *Ta vasc indóe?*  
c. *Ta vasc indónta?*  
'Where are you going?'

Doubling is also possible, but only if *indó* occurs initially in the sentence and one of the other two forms sentence finally (all other combinations are excluded):

- (26) a. *Indó vasc indóe?*  
b. *Indó vasc indónta?*  
c. *\*Indóe vasc indó?*  
d. *\*Indónta vasc indó?*  
e. *\*Indó vasc indó?*  
f. *\*Indóe vasc*  
g. *\*Indónta vasc indónta?*  
h. *\*Indóe vasc indónta?*  
i. *\*Indónta vasc indóe?*  
'Where are you going?'


Galli (2017) applies the tests of 'cliticisation' to the element 'where' observing that only *indó* displays the typical properties of a clitic, i.e., it cannot be used in isolation, it cannot be separated from the inflected verb (see above the observation on SCLI), it cannot be coordinated and it cannot be stressed (as it should have to be in sentence final position):

- (27) a. *\*Mi a vai. Indó?*  
'I am going. Where?'  
b. *\*Indó, segont da ti, l'è sgi?*  
'Where, in your opinion has he gone?'  
c. *\*Ta vasc indó?*  
'Where are you going?'  
d. *\*Indó e co ci t'arasc al mar?*  
'Where and with whom you will go to the sea?'

We can conclude that doubling is only possible when the clitic form occurs 'sentence-initially,' and one of the two strong forms 'sentence-finally', although pied piping of the whole *wh*-features to the sentence's initial position is possible. In addition, *wh*-in-situ, i.e., the empty version of doubling, is possible, and evidently here the clitic form is excluded.

The second set of empirical generalizations discussed by Benincà and Poletto (2005) is the following:



- Elements like *who* and *how* can also display clitic-like properties but this is less frequently the case; moreover, the presence of
- (28) a.  clitic/tonic pairs for *who* and *how* in a language implies that both *where* and *what* also behave as such.
- b. If a language allows *wh*-in situ co-occurring with SCLI, the only *wh*-items that can be left in situ are those that can become clitics.
- c. If a language allows *wh*-doubling co-occurring with SCLI, the only *wh*-items that can double are those that can become clitics.
- d. The *wh*-element corresponding to *why* never behaves as a clitic, and is always expressed by a compound form.

As pointed out by Poletto (2000), in the Ladin dialect of Pera di Fassa the *wh*-item *co* ‘how’ patterns with *che* ‘what’ in requiring adjacency to the inflected verb, as clitics typically do, and contrasts with *can* ‘when’ in requiring strict adjacency to the inflected verb:

- (29) a. *Can vas-to pa?* Pera di Fassa  
when go-you *particle*  
‘When are you leaving?’
- b. *Can pa tu vas?*  
when *particle* you go?
- (30) a. *Co l fas-to pa?*  
how it do-you *particle*  
‘How do you do it?’
- b. \**Co pa tu l fas?*  
how *particle* you it do
- (31) a. *Che compres-to pa?*  
what buy-you *particle*  
‘What are you buying?’
- b. \**Che pa tu compre?*  
what *particle* you buy

The Western Venetan dialects of Gazzolo d’Arcole and Illasi exemplify the case where both *wh*-in-situ and *wh*-doubling are only found with the *wh*-items corresponding to ‘what’, ‘where’, and ‘who’:

- (32) a. *Ci ghe-to visto ci?* Gazzolo d’Arcole (Western Veneto)  
who have-you seen who  
‘Whom did you see?’
- b. *Sa ghe-to magnà cossa?*  
what have-you eaten what  
‘What did you eat?’
- c. *Ndo la ghe-to magnà ndoe, la pasta col pesto?*  
where it have-you eaten where, the pasta  
with pesto  
‘Where did you eat pasta with pesto?’
- (33) a. \**Parcozza cori-to parcozza?*  
why run-you why
- b. \**Quando ghe ghe-to magnà quando, in chel ristorante li?*  
when there have-you eaten when, in that restaurant there
- (34) a. *Ci a-la visto ci?* Illasi (Western Veneto)  
who has-she seen who  
‘Whom did she see?’
- b. *Ci a telefonà ci?*  
who has phoned who  
‘Who phoned?’
- c. *Sa e-to dito che?*  
what have-you said what  
‘What did you say?’
- d. *Ndo va-lo (a)ndoe?*  
where goes-he where  
‘Where is he going?’

- (35) a. \**Quando* ve-to *quando*?  
when go-you when  
b. \**Parchè* ve-to via *parchè*?  
why go-you away why

The last *wh*-word in the implicational scale which can become a clitic (and be left in situ and doubled) is the element corresponding to ‘when’. Further dialects which illustrate this pattern are those of Northern Veneto, where the *wh*-items that can be found in situ are the ones discussed above plus the *wh*-item corresponding to ‘when’:

- (36) a. A-tu parecià *che*?                      Belluno (Northern Veneto)  
have-you prepared what?  
‘What did you prepare?’  
b. Va-lo *andé*?  
goes-he where?  
‘Where is he going?’  
c. Se ciame-lo *comé*?  
himself calls-he how  
‘What’s his name?’  
d. E-lo partì *quando*?<sup>5</sup>  
is-he left when  
‘When has he left?’
- (37) a. *Parché* sé-tu vegnest?                      Belluno (Northern Veneto)  
why are-you come  
‘Why did you come?’  
b. \**Sé*-tu vegnest *parché*?  
are-you come why
- (38) a. *Quanti libri* à-tu ledest?                      Belluno (Northern Veneto)  
how many books have-you read  
‘How many books have you read?’  
b. *Che vestito* à-la comprà?  
which dress has-she bought  
‘Which dress has she bought?’  
c. \*A-tu ledest *quanti libri*?  
have-you read how many books  
d. \*A-la comprà *che vestito*?  
has-she bought which dress

The above generalizations can be expressed through the following implicational scale, which is valid for (a) clitic *wh*-items; (b) *wh*-in-situ; and (c) *wh*-doubling:

- (39) what/where < how/who < when \*why \*wh+N

Notice that this implicational hierarchy is virtually identical to Keenan and Comrie’s (1977) Case hierarchy which has been applied in many other domains, such as Case morphology (see Caha 2009) and relative clauses (see Poletto and Sanfelici 2015). As for the main point under discussion here, we must conclude that the subtype of *wh*-in-situ that triggers SCLI and *wh*-doubling are two sides of the same coin: *wh*-in-situ can be seen as a special case of *wh*-doubling where one of the two doubled forms is phonetically un-spelled. Evidently, *wh*-in-situ can also be a totally different structure, at least in those languages where there is no alternation with doubling. Since there are different types of *wh*-doubling, at least one with a clitic and a full form of the same *wh*-item and a second one where the higher doubled form is not a clitic but a pure operator realized as the element “what”, we expect to have different types of *wh*-in-situ, and actually, as shown by the Paduan case, we do find them. The same is true of *wh*-movement. Therefore, clitic doubling does not only exist for DPs and personal pronouns, but also for other types of nominal expressions, as *wh*-items are. Hence, among the logical possibilities of movement we have the three following ones: the first is overt doubling, the second is *wh*-in situ, the third includes regular cases of *wh*-movement:

- (40) a. [cl-wh] V SCL . . . . [strong wh]
- b. [~~cl-wh~~] V SCL . . . . [strong wh]
- c. [cl-wh] V SCL . . . . [~~strong-wh~~]
- d. [strong wh] V SCL . . . . [strong-wh]

Under this approach, one could treat the optionality of in situ cases and its alternance with doubling as optionality in the spelling-out of the lower or higher copy of the *wh*-item. In what follows we will try to argue that not all cases of doubling are alike, and this is related to the properties that doubling displays in the various languages; when doubling adds a semantic contribution to the clause, it should be treated as a case of splitting of the relevant CP feature (most probably an evaluative one, following [Munaro and Obenauer 2002](#)) and not as a case of doubling in the sense that the feature occurs twice in the structure.

### 3. Types of Doubling

In the previous section we have seen that the properties of the higher doubled form can be those of a clitic (see Section 2.1), but this is not necessarily the case; the higher doubled form can also be a weak form or a fully-fledged *wh*-item which is a pure operator that does not copy the features of the *wh*-item sitting in the lower position, but simply marks the higher scope position. In what follows we will take into account various types of doubling and analyze their properties.

#### 3.1. Weak *wh*-Doubling

The first type of doubling we discuss in addition to clitic doubling is the one found in the Lombard dialects where no SCLI is observed. This phenomenon has a distribution that is similar to the one of clitic *wh*-doubling, since in many dialects it is restricted to *wh*-words only and often to the class identified by the implicational scale reported in (39). As shown by [Poletto and Pollock \(2009\)](#), *wh*-elements like *cusa/cuma/indua* have properties that make them akin to clitics, since they cannot be realized in isolation (cf. (41f)), and must be adjacent to the inflected verb, as the following examples show. Nevertheless, they cannot be identical to clitics, since they are disyllabic and can carry word accent:

- |      |    |   |                                    |                               |                               |
|------|----|---|------------------------------------|-------------------------------|-------------------------------|
| (41) | a. | <i>Cusa</i> ta mangiat<br>par solit?    | Mendrisiotto                       | what you eat for<br>usual?    | 'What do you<br>usually eat?' |
|      | b. | <i>Cusa</i> l'è che ta<br>mangiat?      | what it is that you<br>eat?        | 'What is it that<br>you eat?' |                               |
|      | c. | *Ta mangiat <i>cusa</i> ?               | you eat what?                      |                               |                               |
|      | d. | * <i>Cusa</i> che ta<br>mangiat?        | what that you eat?                 |                               |                               |
|      | e. | *Al so mia <i>cusa</i><br>che al mangia | I-it know not<br>what that he eats |                               |                               |
|      | f. | * <i>Cusa</i> ?                         | what?                              |                               |                               |

This is in contrast to *wh*-elements like *cusè/cumè/indue*, which can occur in isolation, in the lower position, can be separated from the inflected verb and can be preceded by a preposition:

- |      |    |  |              |
|------|----|--|--------------|
| (42) | a. | <i>Cusè</i> che ta mangiat?<br>what that you eat?<br>'What are you eating?'                                | Mendrisiotto |
|      | b. | <i>Cusè</i> ta mangiat?<br>what you eat?<br>'What are you eating?'   |              |
|      | c. | Da <i>cusè</i> ii parlàa?<br>of what have-you talked?<br>'What did you talk about?'                        |              |
|      | d. | Al so mia <i>cusè</i> che al mangia<br>I-it know not what that he eats<br>'I don't know what he is eating' |              |
|      | e. | <i>Cusè</i> ?<br>what?   |              |

This suggests that the series with the accented /ε/ is strong, while the series without this morpheme is its weak counterpart. We do not adopt [Cardinaletti and Starke's \(1999\)](#) idea that there are only three types of pronouns (clitic, weak and strong), but rather suggest that pronouns can spell out one or more functional features. If you consider personal clitic pronouns in Romance, they actually spell out a Case feature that is not present in tonic pronouns, so it cannot be the case that their higher portion is more deficient than the one of tonic pronouns, rather they simply spell out different features. Tonic pronouns might also be seen as deficient with respect to clitics in terms of Case, so deficiency is not the right term here. We rather have to consider which features each form spells out in relation to the others of the system. As put forth by [Munaro \(1999\)](#), [Poletto and Pollock \(2009\)](#) and [Manzini \(2014\)](#), in cases like (42) the morpheme /ε/ is certainly derived from the third person singular of the indicative present of the verb 'be', in what was originally some sort of cleft construction, a structure that is very widely used in the NIDs. This hypothesis is supported by the fact that, as discussed in [Donzelli and Pescarini \(2018\)](#), there are Lombard dialects (they discuss the dialect of Caverghno) that display also a form of the third person subject clitic /u/ attached to the /ε/ morpheme, providing the form [kuz ε-u], which can only occur in situ and is dubbed as "superstrong". This means that *wh*-items in the NIDs do not have three classes but four: clitics, weak, strong and superstrong. In a view that conceives doubling as either copying or splitting of features across different positions in the clause, we could assume in principle that there exist as many pronominal forms as features. In theory then, we do not only have two or three or four classes of pronouns, but a form for each functional feature that a certain type of (personal, possessive, or *wh*-) pronoun can express.

The proposal that these pairs are to be treated on a par with clitic doubling is strengthened by the fact that in Mendrisiotto we find structures like the following, where a weak *wh*-item in sentence initial position co-occurs with a strong version of the same *wh*-item in sentence internal position (but never the opposite):

- (43) a. *Cusa t'è fai cusè?* Mendrisio (Northern Lombard)  
 what you have done what  
 'What have you done?'  
 b. *Cuma ta l'è cùsinaa cumè?*  
 how you it have cooked how  
 'How did you cook it?'  
 c. *Indua ta vet induè?*  
 where you go where  
 'Where are you going?'
- (44) a. \**Cusè t'è fai cusa?* Mendrisio (Northern Lombard)  
 what you have done what  
 b. \**Cumè ta l'è cùsinaa cuma?*  
 how you it have cooked how  
 c. \**Induè ta vet indua?*  
 where you go where

Now, compare (44) with the following cases of clitic *wh*-doubling attested in the same dialect:

- (45) a. *Sa ta mangiat (cusè)?* Mendrisio (Northern Lombard)  
 what you eat (what)  
 'What are you eating?'  
 b. *Me ta l'è cùsinaa (cumé)?*  
 how you it have cooked (how)  
 'How do you cook it?'

In light of the parallel between cases like (43) and cases like (45), we can conclude that weak *wh*-doubling is subject to an implicational hierarchy<sup>6</sup> which is similar to the one reported above for clitic *wh*-doubling, hence weak *wh*-doubling is presumably amenable to the same derivational analysis as the one proposed for clitic *wh*-doubling.

### 3.2. Operator *wh*-Doubling

Operator *wh*-doubling can be defined as having a clitic/weak/tonic form of the *wh*-item *what* at the beginning of the clause and a tonic form of the questioned *wh*-element at the end of the clause.

We have dubbed this type of doubling as operator doubling because here the form of the higher *wh*-item never changes and it is always the form of the element ‘what’, which, following [Munaro and Obenauer \(2002\)](#) and [Grewendorf \(2012\)](#), can be treated as a pure operator with no further internal lexical feature specification. We have already introduced operator doubling in Paduan, which we now examine in detail.

#### 3.2.1. Operator *wh*-Doubling in Paduan

As already anticipated in Section 2, Paduan only has this type of doubling (and not the clitic/strong type). Here the operator is represented by the full form of the element meaning ‘what’, i.e., *cozza*. In addition to the semantic restrictions that we have already discussed in Section 2 and point towards an analysis in terms of splitting of the features of the *wh*-item, operator doubling is sensitive to the type of *wh*-item in Paduan:

- (46) *Cossa inviti-to chi?! Paduan (Central Veneto)*  
 COSSA invite-you who(m)  
 ‘Who (the hell) are you inviting?!’  
 = ‘You should not invite that person.’
- (47) *Cossa ve-to dove?! Paduan (Central Veneto)*  
 COSSA go-you where  
 ‘Where (the hell) are you going?!’  
 = ‘You should not go there.’
- (48) *Cossa vardi-to cozza?! Paduan (Central Veneto)*  
 COSSA look-you (at-)what  
 ‘What (the hell) are you looking/staring at?’  
 = ‘You should not be staring at this.’
- (49) *Cossa ghe ghetto magnà quando?! Paduan (Central Veneto)*  
 COSSA there have-you eaten when  
 ‘When did you eat there?’
- (50) a. *\*Cossa cori-to parcossa?! Paduan (Central Veneto)*  
 COSSA run-you why  
 b. *\*Cossa lesi-to che libro?! Paduan (Central Veneto)*  
 COSSA read-you which book

In Paduan the restrictions on *wh*-doubling with respect to type of *wh*-element that can be doubled is the same found with clitic (and weak) *wh*-doubling: as witnessed by the ungrammaticality of (50), it is not possible to have operator doubling with *why* and complex *wh*-phrases, as we have noticed to be the case with clitic doubling in Veneto varieties like Bellunese, Illasi, etc. and with weak doubling in Mendrisiotto, which is also restricted in the same way. However, operator doubling is not always restricted in this fashion.

#### 3.2.2. Operator *wh*-Doubling in Lombard Dialects

In some Lombard dialects both types of *wh*-doubling exist, i.e., clitic/weak and operator doubling. However, the pattern along which the two types of *wh*-doubling distribute is different. Clitic *wh*-doubling follows the pattern already described above for those dialects that require subject clitic inversion which correlates with *wh*-in-situ. Operator doubling presents a different pattern, since it is restricted to the subset of nominal *wh*-items such as *what*, *who*, *which X*, *how many X*. We illustrate the case in point with the dialect of Monasterolo, a Central Lombard dialect:

- (51) a. *Cosa ghet dacc ö leber a chi?* Monasterolo (Central Lombard)  
 what have-you given the book to whom  
 'Whom did you give the book to?'  
 b. *Cos et lesit che leber?*  
 what have-you read which book  
 'Which book did you read?'  
 c. *Cos et lesit quace leber?*  
 what have-you read how.many books  
 'How many books did you read?'

In this dialect, the pure operator *cosa* 'what' seems to be compatible only with *wh*-items that include a nominal category, like 'who' (which includes PERSON) or a what/which+N *wh*-item. This singles out a different class of *wh*-items with respect to those seen above, that roughly correspond to those nominal expressions that can be selected as arguments of a verb.<sup>7</sup> This points toward an analysis in terms of copying/agreement, i.e., both the lower *wh*-form and the operator in the CP layer share a nominal feature and have to agree with each other for its value. Interestingly, there are dialects that display both types of doubling in short doubling, the clitic/weak type with argumental *wh*-items and the operator-type with nominal *wh*-items. A case in point is Mendrisiotto, where the higher *wh*-operator can be a clitic/weak form of the strong form found in situ, as we have seen in Section 3.1 (see (43)), or a strong form of the *wh*-item corresponding to *what* depending on the *wh*-item:

- (52) a. *Cusè al pésa quantu l tò sacch?* Mendrisio (Northern Lombard)  
 what it weighs how.much the your sack  
 b. *Cusa al pésa quantu l tò sacch?*  
 what it weighs how.much the your sack  
 c. *Sa al pésa quantu l tò sacch?*  
 what it weighs how.much the your sack  
 'How much does your sack weigh?'
- (53) a. *Sa ta parlat de sta roba con quanti oman?* Mendrisio (Northern Lombard)  
 what you talk of this thing with how-many men  
 'With how many people do you talk about this?'  
 b. *Sa ta n mangiat quanta?*  
 what you-of.it-eat how.much  
 'How much do you eat?'  
 c. *Sa l cur par cusè?*  
 what he runs for what  
 'Why is he running?'

On the other hand, dialects in which only non-adverbial *wh*-items can be operator doubled (as we have seen in Paduan) are found throughout the Central-Eastern Lombard area:

- (54) a. *Che 'ncontre-t chi?* Malonno (Eastern Lombard)  
 what meet-you who  
 'Whom are you meeting?'  
 b. *Ch' ò-i desmentegà chi?*  
 what have-I forgotten whom?  
 'Whom have I forgotten?'  
 c. *Che fara-i miga 'nvidà chi?*  
 what will.do-they not invite who  
 'Whom will they not invite?'
- (55) a. *Che mänge-t 'nséma chi?* Malonno (Eastern Lombard)  
 what eat-you with who  
 'Whom are you going to eat with?'  
 b. *Che fè-t dàjel a chi?*  
 what do-you give.it to whom  
 'Whom will you give it to?'

- (56) a. *Che l'è-t fat con che ròba?* Malonno (Eastern Lombard)  
 what it have-you done with which thing  
 'With what did you do it?'  
 b. *Ch' é-f parlà de chè?*  
 what have-you talked about what  
 'What have you talked about?'  
 c. *Ch' ö-t qual?*  
 what want-you which  
 'Which one do you want?'
- (57) a. *Che pàrle-t de chi/de che ròba?* Monno (North-Eastern Lombard)  
 what talk-you of whom/of which thing  
 'About whom/about what are you talking?'  
 b. *Che l'è-t fat con che ròba?*  
 what it have-you done with which thing  
 'What did you do this with?'  
 c. *Che fè-t fàl con què?*  
 what do-you do.it with what  
 'What do you do this with?'  
 d. *Ch' é-f parlà de chè?*  
 what have-you talked of what  
 'What did you talk about?'  
 e. *Che tire-t fò chi/qual?*  
 what take-you out what/which  
 'What/Which one do you choose?'

We surmise that in these Lombard dialects the reason why short operator doubling is only possible with nominal *wh*-phrases is that the element *what* still retains a nominal feature (see below Section 4 for a more detailed discussion), while this is not the case in dialects like Paduan or Mendrisiotto.<sup>8</sup>

#### 4. The Most Liberal Pattern and Some Speculations on the Doubling Process

Another pattern of *wh*-in-situ can be found either in French or in the Trevigiano dialect of Santa Lucia di Piave (as discussed extensively by Bonan 2019, 2021). Here, all *wh*-items can remain in situ except for the element corresponding to 'why', a pattern also attested in French. The dialect of Santa Lucia is an optional in situ language, as colloquial French also seems to be; there is a high degree of optionality in the in-situ/ex-situ alternation:

- (58) a. *Chi ga-tu catà?*  
 whom have-you found  
 b. *Ga-tu catà chi?*  
 have-you found whom  
 'Who did you meet?'
- (59) a. *T'as mis la clef où?*  
 you've put the key where  
 'Where have you put the key?'  
 b. *Tu rencontres toujours qui?*  
 you meet always whom  
 'Who do you keep meeting?'
- (60) a. *Pourquoi il fait ça, ce type?*  
 why he does that, that bloke  
 'Why does that bloke do that?'  
 b. *?(?) Il fait ça pourquoi, ce type?*  
 he does that why, that bloke  
 'Why does that bloke do that?'

- (61) a. Dans *quel but* il fait ça, ce type?  
in what goal he does that, that bloke  
'What does that bloke do that for?'
- b. Il fait ça dans *quel but*, ce type?  
he does that in what goal, that bloke  
'What does that bloke do that for?'

In French, the only *wh*-item that is not allowed in the in-situ position is the element corresponding to 'why', all other *wh*-items (including complex *wh*-phrases) are possible. At the same time we observe that in French SCLI is impossible in these contexts. If we compare French with the dialect of Santa Lucia, we observe the same pattern: Also in Santa Lucia all *wh*-items are possible in situ, as well as in the left periphery. There are only two exceptions to this optionality: the *wh*-word *che*, which is only felicitous clause-internally, as shown in (62), and the *wh*-word *parché*, which only appears clause-initially, as shown in (63):

- (62) a. Vo-tu *che*?  
want-you what
- b. \**Che* vo-tu?  
what want-you  
'What do you want?'
- (63) a. *Parché* te si ndaa al marcà?  
why you-are gone to.the market
- b. ??/\* Te si ndaa *parché* al marcà?  
you-are gone why to.the market  
'Why did you go to the market?'

Aside from the exceptions in (62) and (63), *wh*-words in the dialect of Santa Lucia di Piave are distributionally rather free. In fact, not only bare *wh*-items, but also complex *wh*-phrases can be licensed clause-initially and clause-internally, as in (64):

- (64) a. Ga-tu leto *cuanti libri*?  
have-you read how.many books
- b. *Cuanti libri* ga-tu leto?  
how many books have-you read  
'How many books did you read?'

Note that the *wh*-word *parcozza*, unlike *parché*, can be licensed both in situ and in a fronted position, as exemplified in (65) (see [Bonan and Shlonsky 2021](#) for details):

- (65) a. *Parcozza* si-tu ndaa al marcà?  
why are-you gone to.the market
- b. Si-tu ndaa *parcozza* al marcà?  
are-you gone why to.the market  
'Why did you go to the market?'

So, the distribution of *wh*-items in French and Santa Lucia is similar, the only difference being SCLI. In particular the dialect of Santa Lucia di Piave constitutes an exception to [Benincà and Poletto \(2005\)](#)'s generalization reported in (28b) above, because SCLI is indeed possible also in a system which has unrestricted *wh*-in-situ.

This type of *wh*-in-situ is most probably not of the same type as the others described above, since its distribution is different. We surmise that the different types we have identified depend on the number of features that are copied or split from the lower onto the higher copy, so that there can either be a completely pure operator, as it is the case of operator doubling in Paduan and *wh*-in-situ in French and Santa Lucia, or an operator containing a nominal feature, as it is the case of short operator doubling in Monasterolo, Mendrisio, Monno and Malonno. For ease of exposition, we summarize the whole paradigm of the various types of *wh*-doubling and *wh*-in-situ in the following synoptic Table 1:



**Table 1.** *Wh*-in-situ and *wh*-doubling strategies in the NIDs.

	<i>Wh</i> -In Situ	Clitic/Weak <i>wh</i> -Doubling	Operator <i>wh</i> -Doubling
What	Borgomanero	Camuno	
Where	Livigno	Livigno	
What, where	Monno	Monno	
What, where, who	Gazzolo	Gazzolo, Illasi	
What, where, who, how	Mendrisio	Mendrisio	
What, where, who, how, when	Belluno		Padua
Nominal <i>wh</i> -phrases	Mendrisio		Monno, Malonno, Monasterolo
All <i>wh</i> -items (except <i>why</i> )	Santa Lucia, French		

Since in *wh*-in-situ the higher copy is empty, *wh*-in-situ can be interpreted in different languages as any type of overt *wh*-doubling we have identified so far and most notably as operator doubling, where the higher copy only has an operator feature and nothing more. So, it can be compatible with a large set of *wh*-items and provides no special interpretation of *wh*-in-situ, giving rise to the apparent optionality between overt movement and apparent in situ that has been observed in French and Santa Lucia di Piave. The distinction between French and Santa Lucia on the one hand, and Bellunese on the other, has to do with the possibility to leave in situ *wh*-phrases containing a lexically realized nominal head. This might attest to the fact that doubling of *wh*-phrases is fundamentally different from doubling of *wh*-words, as doubling of personal pronouns shows.

At this point we can provide a small typology of *wh*-doubling based on the distinction between copying and splitting crossed with Keenan and Comrie’s implicational scale:

- (a) In all those dialects in which the doubling structure is related to a different semantic import (i.e., the Paduan operator doubling case), we argue that this is so because the doubling process splits the features of the *wh*-item in two, and the higher copy realizes the additional modal feature that special questions possess.
- (b) In all those dialects in which the doubling structure is semantically identical to the non-doubling one (the type most widespread in Eastern Lombardy and Illasi), we have cases of copying of all (in the case the two forms are identical) or only some (in the case the two forms are morphologically different) of the features.
- (c) In all those dialects in which the implicational scale (i.e., Keenan and Comrie’s hierarchy) is at work (for instance Illasi, Padua, Livigno etc.), we take a Kaynian view and propose that the higher doubled form copies the ontological null category, i.e., the classifier-like null functional N that is contained in the internal structure of *wh*-items (THING for “what”, PERSON for “who”, PLACE for “where”, MANNER for “how” TIME for “when”). The reason why some classifier-like elements are easier to copy than others might be related to the position in the internal structure of the *wh*-item, but this remains to be investigated.
- (d) In all those dialects in which only nominal *wh*-items can be doubled (i.e., the Monasterolo case), we argue that a process of copying/agreement of the nominal feature must be active.

Notice that there are cases in which we have to assume that copying and splitting both take place in the same structure, but this is actually expected, because the agreement process is potentially constrained only by the presence of features on both elements. So, *wh*-doubling does not need a ‘big-DP hypothesis’ in the sense that those languages that display doubling possess a more complex structure than the languages that do not display it.<sup>9</sup> The only difference consists in a copying or splitting procedure which is active or not. On a more general vein, we could say that languages that have doubling as copying are languages similar to those that have overt agreement features and those that have splitting are similar to those that have argumental clitics. Regardless, it remains to be determined which features are copied/split from the whole *wh*-item. We follow and integrate the

proposal originally made in [Poletto and Pollock \(2009\)](#) (capitalizing on [Munaro and Pollock 2005](#); [Poletto and Pollock 2004](#)) and propose that *wh*-words have at least the following three projections:

(66) [DisjunctionP [Existential [RestrictorP]]]

Disjunction is the operator that opens up the set of alternatives among which the addressee should choose the value. Lower down we have an existential projection and a restrictor that hosts the classifier-like element, the one that is copied in dialects like Monasterolo, where doubling is sensitive to the type of ontological category and can only occur with some of them. Cases of operator doubling of the Paduan type only split the highest element, i.e., the Disjunction feature. Clitic and weak doubling copies or splits Disjunction and Existential, but probably not the Restrictor, so they are defective in their lower portion, the most lexical one. Hence, we can modularize *wh*-doubling in terms of type and number of features that are either copied or split from the lower copy. Interestingly, this idea also derives why it is easier to double bare *wh*-words than *wh*-phrases which contain a lexical N: it is more difficult to interpret a lexical category as a feature that can undergo an agreement procedure. So, doubling of complex items generally implies the presence of doubling of simple *wh*-words.

## 5. Confuting Potential Objections to Some Basic Assumptions

The empirical domain underlying some significant descriptive generalizations on *wh*-in-situ and *wh*-doubling in the Northern Italian dialects has been considerably enlarged by the important work by [Manzini and Savoia \(2005\)](#), who provide a systematic description and sketch a formal account of the distributional properties of *wh*-elements across Northern Italo-Romance. While we acknowledge the relevance of this important precedent both on a descriptive and on an explanatory level, in this section we will address some potential objections, put forth mainly by [Manzini and Savoia \(2011\)](#) and [Manzini \(2014\)](#), to some of the basic assumptions that we have adopted, showing that these objections can be refuted both on empirical and on conceptual grounds.

### 5.1. Objections to the Doubling Approach

The analysis of *wh*-in situ in Northern Italian dialects, developed for example in [Poletto and Pollock \(2004\)](#), relies not only on remnant movement but also on a particular analysis of clitic doubling, of which *wh*-doubling (including covert *wh*-doubling, i.e., *wh*-in situ) is considered to be an instance. There are essentially two main families of analyses of clitic doubling: the first one considers the clitic as a sort of functional marker; in the case of personal pronouns it is a subject or object agreement marker, depending on the thematic role of the doubled element; for *wh*-items, it should be instead some sort of operator marking the scope in the CP layer. The second line of thought is based on movement: this analysis assumes that a clitic and the phrase it doubles are base generated as part of the same 'big DP'; specifically, the clitic represents its head and the phrase it doubles its specifier. [Manzini and Savoia \(2011\)](#) challenge the claim that *wh*-doubling is an instance of clitic doubling as well as the claim that *wh*-in situ is an abstract version of *wh*-doubling.

As for the latter assumption, Manzini & Savoia point out that there are several varieties where the same *wh*-element that appears in situ also appears in the left periphery of the sentence. This is exemplified in (67) with *cusè*, *cohè* 'what' appearing in the left periphery in (67b) and in situ in (67a):<sup>10</sup>

- |      |    |  |                 |
|------|----|--|-----------------|
| (67) | a. | <i>Se fa-la cusè?</i><br>what does-she what                | Olgiate Molgora |
|      | b. | <i>Cusè fa-la?</i><br>what does-she<br>'What does she do?' |                 |

According to Manzini & Savoia, if the clause internal occurrence of the *wh*-element in (67a) depends on doubling by a silent *wh*-clitic, in the left periphery we expect to find a *wh*-clitic, and not the very same element, as in (67b). They also observe that the lack of

necessary morphological distinction between in situ and left peripheral *wh*-items can be seen with *chi* ‘who’ in practically all the varieties considered, leading also to the doubling of two identical elements, as in (68c):

- (68) a. *Chi ciàmet?* La Strozza  
 who you.call  
 ‘Whom are you calling?’  
 b. *Ciàmet chi?*  
 you call who  
 c. *Chi ciàmet chi?*  
 who you.call who  
 ‘Whom are you calling?’

Nonetheless, as pointed out in [Barbiers \(2008\)](#), the criterion of the morphological distinction is not a necessary condition for assuming the existence of two different series of elements, one tonic and one clitic, as witnessed, for example, by the homophony of clitic and tonic pronouns in French. Among several examples of morphological identity between clitic and tonic forms, we report the cases of French subject clitics like *elle/elles*, cases of object enclitic *moi, toi*, and the case of *lui*, which is at the same time a tonic pronoun and a dative clitic. Hence, morphological identity is well known in the realm of clitics and has never been used as an argument to assume that French does not have subject or object clitics. As for the conclusion that *wh*-doubling is clitic doubling, [Manzini & Savoia](#) refer to the dialect of Olgiate, where overt doubling is possible not only when the left peripheral *wh*-element is the clitic *se* ‘what’, but also when it is non-clitic, namely *cusa* ‘what’, as in (69):

- (69) *Cusa/se fa-la cusè?* Olgiate Molgora  
 what does-she what  
 ‘What does she do?’

As will be discussed in the next section, we assume here, following [Poletto and Pollock \(2009\)](#), that forms like *cusa/cosa* are actually weak versions of the relevant *wh*-item which can enter the *wh*-internal structure and are always merged as one of the two elements of a complex *wh*-phrase.

## 5.2. Objections to the Tripartition of *wh*-Items

A further conclusion drawn by [Poletto and Pollock \(2009\)](#) is that while the weak *cusa, cuma* always require a double—i.e., are always merged as one of the two elements of a complex *wh*-phrase—just like clitics *sa/se* and *me*, strong forms like *cusè* do not. According to [Poletto & Pollock](#), the existence of three series of *wh*-pronouns in Lombard varieties, clearly distinct morphologically, and in part also distributionally, seems to provide a good argument in favor of the clitic/weak/strong tripartition of pronouns. This view is challenged by [Manzini \(2014\)](#), who recognizes that these varieties have *wh*-clitics which are lexicalizations of left-peripheral WH-heads; on the other hand, [Manzini](#) points out that the weak-strong distinction does not help in predicting the distribution of the two other, non-clitic series of *wh*-pronouns, with stress on the lexical base and with final— $\epsilon$  morphology, if the same positions can host either form. Consequently, the burden of proof is on the proponents of the strong/weak categorization to show that different positions are involved. Also [Manzini and Savoia \(2005, 2011\)](#) challenge the structuring of pronouns that underlies the tripartition in ‘clitic’, ‘weak’ and ‘strong’ forms and hence the validity of the corresponding descriptive categories, pointing out that in Grumello in (70) the supposedly strong and weak forms *indoè* and *indoe* alternate in sentence final position, linearly non-adjacent to the verb (i.e., not left adjacent) and focal:

- (70) *Al la port-el indoe/indoè?* Grumello  
 he.it brings-he where  
 ‘Where does he bring it?’

They also consider *wh*-doubling in the dialect of Adrara; as expected, the doubling structure in (71) has *indo* ‘where’ in the left peripheral position and ‘strong’ *indoè* in situ:

- (71) *Indo et indoè?*                      Adrara San Rocco  
 where you.go where  
 'Where are you going?'

However, they point out that in the variety of Passirano exemplified in (72) the in situ position is crucially taken by *endoe*, whose stress pattern would make it a variant of *indo/endo*:

- (72) a. *Che nif endoe oter?*                      Passirano  
 what come-you where you  
 'Where are you coming?'  
 b. *Durmì:f endoe?*  
 sleep-you where  
 'Where do you sleep?'

We simply point out that the three forms *endoe/indoe/indoè* can be taken to be alternative trisyllabic variants of the strong form, as opposed to the weak disyllabic *endo/indo* and the clitic monosyllabic *ndo*;<sup>11</sup> under this view, these data no longer represent counterexamples to our generalization that only strong forms can appear in situ. As to the form *comè* in (73), this is clearly a strong version of the weak *wh*-element *come* (as witnessed by (74c) below):

- (73) a. *Che fif comè oter?*                      Passirano  
 what do-you how you  
 'How do you manage?'  
 b. *Get durmìt comè?*  
 there have-you slept how  
 'How did you sleep there?'

Manzini and Savoia (2011) conclude that there is a clear distributional constraint on *wh*-clitics, which only appear in the left periphery of the sentence, either alone or doubling *wh*-phrases in situ. On the other hand, non-clitic *wh*-phrases, including those that Poletto and Pollock (2009) would classify as 'weak', those that they would classify as 'strong' and *wh*-phrases inclusive of a restrictor equally distribute at the left periphery and in situ. However, the following data from Manzini and Savoia (2011) clearly show that, even if strong forms may very occasionally appear fronted to the left-periphery (like clitic and weak forms), as witnessed by (67b) above, they generally occupy the in situ position:

- (74) a. *Ndo l purtif indoè?*                      La Strozza  
 where it bring-you where  
 'Where are you bringing it?'  
 b. *Cosa fet cosè?*  
 what you-do what  
 'What are you doing?'  
 c. *Come fif comè?*  
 how do-you how  
 'How are you managing?'
- (75) a. *M i durmì cumè?*                      Civate  
 how you.have slept how  
 'How did you sleep?'  
 b. *Se fet cusè?*  
 what you.do what  
 'What do you do?'  
 c. *Indé l dorma nduè?*  
 where he sleeps where  
 'Where does he sleep?'
- (76) a. *Fal cohè?*                      Cologno  
 does-he what  
 b. *Coha fa-l?*  
 what does-he  
 'What does he do?'

- |      |    |  |          |
|------|----|--|----------|
| (77) | a. | <i>Coha l fet kon cohè?</i><br>what it you.do with what                            | Grumello |
|      | b. | <i>Se l fet kun cusè?</i><br>what it you.do with what<br>'What do you do it with?' | Olgiate  |

These data from different Lombard dialects provide direct empirical evidence in favor of the taxonomic distinction of *wh*-items in three different morphological classes with different structural and distributional properties: clitic and weak *wh*-items can appear only in clause initial position, while strong ones can appear both clause initially and clause internally.

## 6. Concluding Remarks on Doubling and In-Situ *wh*-Items

Summing up what we have discussed so far, we can reach the following conclusions on the basis of the data we have presented:

- (a) *Wh*-in situ cannot be seen as a unitary phenomenon, but has a different distribution across types of *wh*-items in various dialects. Among the various restrictions we have found, we can state that there is no direct link between SCLI and the distinction between the restricted type of *wh*-in-situ/doubling which only allows it with argumental *wh*-items and the more relaxed French-like type, since, as noted by Bonan (2019), the dialect of Santa Lucia has SCLI and allows for generalized in situ, contra Benincà and Poletto (2005).
- (b) Also *wh*-doubling cannot be reduced to a single analysis but rather amounts to a family of phenomena, which have the basic copying or splitting procedure of features in common (we refer to the proposal by Barbiers 2008)<sup>12</sup>, but where the copying mechanism applies to different subsets or packages of features and is constrained in different ways. We have also noticed that there are several types of doubling: clitic *wh*-doubling, weak *wh*-doubling and operator *wh*-doubling.
- (c) Some types of doubling, but crucially not all, correspond in their distribution with some types of *wh*-in-situ, which shows that they must be somehow related; this means that there might be different types of *wh*-in-situ depending on the operator, clitic or weak status of the null higher doubled form. In several dialects doubling/in situ can add a special interpretive shade to the interrogative clause, as doubling/in-situ are interpreted in some dialects exclusively as non-canonical questions, which means that the higher doubled form has an additional value which is not shared by the lower one; we conclude that in those dialects doubling cannot be analyzed as a procedure that copies only a subset of the features that belong to the lower doubled form, but as a splitting of features between the two doubled forms, so that the higher one has one additional feature that the lower one does not possess.

In addition to these empirical observations, we have shown that there is an implicational hierarchy, partly replicating Keenan and Comrie's (1977) Case hierarchy, which captures the distribution of both *wh*-in-situ and *wh*-doubling. This hierarchy is probably to be split into two distinct hierarchies, which are orthogonally related to each other: one which has to do with complex *wh*-phrases versus *wh*-words, and the other having to do with the probability of the element to be doubled or left in situ:

(78) What/where → how/who → when → why

(79) Wh-words → Wh phrases

The case of (79) is rather self-explanatory and states that *wh*-phrases containing a *wh*-modifier and a lexically realized nominal head are generally more rarely doubled than bare *wh*-words. In all the dialects in which we have found doubling or in situ *wh*-phrases there are also *wh*-words that can be doubled/left in situ, while there are cases of dialects displaying *wh*-doubling or *wh*-in situ with *wh*-words but not with *wh*-phrases. Even the case of Monasterolo discussed above, where operator doubling is possible only with 'nominal' *wh*-items, i.e., 'what', 'who' and 'which X', still includes at least some *wh*-words in addition

to *wh*-phrases. We have not found a single dialect where *wh*-phrases can be left in situ or doubled that does not allow for at least some *wh*-words to be doubled or left in situ. We think this is the effect of a general restriction on doubling which concerns the number of features that can be cumulated onto a single element, so that the more features there are, the more this element will be prone to be split, as shown in Poletto (2008). Evidently, functional features like Disjunction or Existential are more easily subject to copying than lexical elements, which is the fundamental reason why (79) exists. The lexical complexity of the *wh*-item plays a role here, as having an independent word for the lexical restriction evidently cumulates less information on the *wh*-item itself. Notice that the extreme case in which all *wh*-elements can be left in situ (as for instance in spoken French) might not be a case of covert doubling (as Bellunese seems to be), but a different structure, an assumption that we leave for future research. In our view, doubling can be ultimately explained by means of a copying and/or splitting process and by Keenan and Comrie's implicational scale, which we tentatively interpret as a case of copying of a classifier-like element located in the internal structure of the *wh*-item itself. Why some classifiers are more easily copied than others still awaits a systematic investigation. As for the implicational hierarchy reported in (78), we simply note that it partly overlaps with the Case hierarchy, because it is sensitive to the thematically determined argumentality of the *wh*-word. At present we still do not know how to interpret the sequence in (78), namely why internal arguments are more prone to be doubled and left in situ than unselected constituents, although this is clearly reminiscent of Keenan and Comrie's (1977) Case hierarchy;<sup>13</sup> however, this seems to be a rather robust observation, which actually coincides with the distribution of clitic personal pronouns (as originally noted by Benincà and Poletto 2005). The element corresponding to *why* is special in itself, because it can be generated within the CP layer (cf. Rizzi 2001), which explains why this *wh*-item is so difficult to double and to leave in situ. Evidently, this also depends on the analysis of *wh*-in situ one adopts, which can either be in the argumental position (as in Munaro 1999; Manzini and Savoia 2011), in the low vP left periphery with remnant vP movement (as in Kato 2013; Poletto and Pollock 2020) or in the CP left periphery with remnant IP movement (as in Munaro et al. 2001).<sup>14</sup>

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## Notes

- <sup>1</sup> Previous versions of the present work were presented at the *Wh-doubling workshop* (University of Konstanz, 8–9 October 2015), at the *GenWh-orkshop on Optional Insituness* (University of Geneva, 16–18 January 2018), and at the workshop *Recent Issues in the Syntax of Questions* (University of Konstanz, 8–10 October 2018). We would like to express our thanks to the audiences of these events, to Jean-Yves Pollock and to four anonymous reviewers of *Languages* for very helpful comments and suggestions and constructive criticism on various aspects of our analysis; needless to say, the usual disclaimers apply. For the concerns of the Italian academy, Nicola Munaro is responsible for Sections 1–3 and Cecilia Poletto is responsible for Sections 4–6.
- <sup>2</sup> For the moment, we use the term ‘weak’ in a pretheoretical sense, not referring back to the well-known proposal by Cardinaletti and Starke (1999). Weak interrogative elements are, contrary to clitics, bisyllabic and they can carry word accent.
- <sup>3</sup> Similar effects with a sentence initial conjunction have been noticed for Spanish by Etxepare and Uribe-Etxebarria (2005).
- <sup>4</sup> We dub “operator doubling” the type of doubling in which the higher element is only the form corresponding to ‘what’.
- <sup>5</sup> The bare *wh*-item *quando* can also occur sentence initially, while the others must be left in situ:
  - (i) *Quando é-lo parti?* Belluno (Northern Veneto)  
when is-he left  
‘When has he left?’

<sup>6</sup> We do not provide an explanation of this hierarchy here, because it is a phenomenon that is found across a lot of domains, (for instance overtly marked Case, relative clauses, personal pronouns) and is tangential to our specific focus on *wh*-doubling. It might however be the case that doubling is related to Keenan and Comrie's hierarchy in the sense that it is easier to copy /split some types of features than others. This is a line of thought we leave for future research.

<sup>7</sup> However, Monasterolo also presents clitic/weak *wh*-doubling, but only in long extraction cases, as attested by the following examples:

- (i) a. *Cosa* penset che abe mangiat *cohé*?  
what think that have eaten what  
'What do you think I have eaten?'
- b. *Döet* penset che l'abe enconrada *endoe*?  
where think that her have met where  
'Where do you think I have met her?'
- c. *Chi* penset che abe incontrá *chi*?  
whom think that have met whom  
'Whom do you think I have met?'
- d. *Come* penset che lo facc cöss *comé*?  
how think that it cook how  
'How do you think I cook it?'
- e. *Quando* penset chel sies partit *quando*?  
when think that he be left when  
'When do you think he has left?'
- (ii) a. \**Perchè* penset chel l'abia fat *perchè*?  
why think that he it have done why
- b. \**Quace* penset che ne abe comprat *quace*?  
how.many think that of.it have bought  
how.many
- c. \**Qual giornal* penset che l'abia lesit *qualgiornal*?  
which newspaper think that he have read which  
newspaper

In long extraction also operator doubling is possible, and in this case we see again that it is compatible with several *wh*-items, as it is in Paduan, and not only with 'nominal' ones:

- (iii) a. ?*Cosa* penset che abe incontrá *chi*?  
what think that have met whom  
'Whom do you think I have met?'
- b. *Cosa* penset che l'abe incontrá *endöe*?  
what think that him have met where  
'Where do you think I have met him?'
- c. *Cosa* penset che l'abe fat cöss *comé*?  
what think that it have cooked how  
'How do you think I have cooked it?'

This means that the doubling configuration does not simply depend on the two doubled forms but also on the type of configuration, i.e., short or long *wh*-doubling (meaning by long *wh*-doubling cases of extraction similar to the pattern described in Germanic).

<sup>8</sup> Notice that this type of analysis also accounts for interesting cases noted by Galli (2017) on Livignasco, where a form can pass all the tests for cliticness except for the one of modification (as witnessed by the examples in (27) above), since it can be paired to a preposition:

- (i) *Da indó* lugasc?  
from where come  
'Where are you coming from?'

This forces us to admit that the impossibility to be focused, used in isolation and split from the verb depends on a different property with respect to case (or a preposition). The same problem is found with other supposedly weak elements, like bare quantifiers in Old Italian, which occupy a special position before the past participle, but can be combined with a preposition.

<sup>9</sup> The so-called 'big-DP hypothesis' amounts to the idea that in clitic doubling the clitic and the doubled DP start out as two components of the same lexical constituent (the clitic lexicalizing the head and the DP the corresponding specifier) and eventually move independently from one another; for details the reader is referred to the seminal proposal by Uriagereka (1995), as well as to Belletti (2006), Barbiers (2008), Poletto (2008).

<sup>10</sup> For the sake of internal coherence, we convert here the examples taken from Manzini and Savoia's work into the usual graphic transcription and do not report the data in the original IPA version they provide.

- 11 For a detailed analysis of the internal structure of the *wh*-element corresponding to English ‘where’ across the Northern Italian dialects the interested reader is referred to [Munaro and Poletto \(2014\)](#).
- 12 The reader is referred to [Barbiers et al. \(2022\)](#) for a very recent implementation of this theory in some varieties of German and Dutch.
- 13 This generalization is orthogonal to the frequently remarked fact that subjects cannot in general be left in situ, which has been attributed by [Shlonsky \(2017\)](#), among others, to the specificities of the subject position.
- 14 After all, it is also possible that all the proposed accounts are on the right track for different languages, a possibility which has been explored by [Bonan \(2019\)](#) and that we leave here to future research.

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