Questions in context: the case of French wh-in-situ
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# 5 A role for context: intervention effects

1 Introduction

The previous chapter showed that context can influence the prosodic realisation of French *wh*-in-situ questions. Context may also affect the presence of intervention effects. As I explained in Chapter 2 (Section 5), the term 'intervention effects' refers to the phenomenon that certain expressions, such as *seulement Jean* in (1a), may not precede an in-situ *wh*-phrase (Beck 1996; Bošković 1998; 2000; Chang 1997; Mathieu 1997; cf. Obenauer 1976).

(1) a. **Seulement Jean* arrive   à faire **quoi**?
       only   Jean manages to do   what

   b. **Qu**ᵢ' est-ce que *seulement Jean* arrive   à faire tᵢ ?
       what is-it   that only   Jean manages to do
       'What does only Jean manage to do?'

<div align="right">[Mathieu 1999: 447-448, ex. 12, typographic emphasis added]</div>

W*h*-fronting, on the other hand, is not blocked by a focus expression like *seulement Jean* (1b). The expressions that induce intervention effects, the 'interveners', include focus expressions, a number of quantificational expressions and negation.

    There are many different accounts of intervention effects in French (Baunaz 2011; Bošković 2000; Hamlaoui 2010; Mathieu 1999; Starke 2001). Following Beck (1996) and Bošković (2000) and Starke (2001) for French, among others, I assume that intervention effects arise when an intervening expression blocks the *wh*-phrase from moving covertly to the left periphery of the sentence, as is visualised in (2).

(2) [_{CP} ... intervener ... *wh*-phrase]
                                                    COVERT
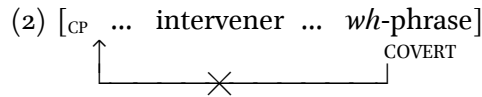
In (1b) above, the *wh*-phrase moves overtly to Spec CP. I assume that in (1a), the *wh*-phrase must move covertly and that covert movement is blocked by the presence of an intervener (cf. Beck 1996; Bošković 1998; 2000; Starke 2001).

In this chapter, I focus on a particular aspect of intervention effects, namely the influence of context. Starke (2001), and building on that, Baunaz (2005; 2011; 2016) show that when a sentence displays intervention effects as in (3), a particular type of context can make it acceptable (3').

(3) **Tous les témoins   ont   reconnu   qui ?
     all   the witnesses have recognized who
     'Whom did all the witnesses recognize?'

(3') During a trial, witnesses and defendants are confronted. One of the
     defendants has been accused unanimously. The journalist asks:

     Et *tous les témoins* ont reconnu qui ?

                                                          [Baunaz 2016: 157, ex. 40b]

This raises the questions (a) what property of the context is responsible for the improvement and (b) why context would have an effect on intervention effects.

As I discussed in Chapter 2, the data regarding intervention effects display much variation. Judgments may be different for different interveners. Moreover, there is variation regarding sentences with the same intervener. As context may have an effect on acceptability, it may explain some of the variation that is described in the literature. The effect of context may also be relevant for judgments of sentences without context. That is, if a sentence is presented in isolation, a speaker is free to envisage his/her own context.

Consequently, in order to further understand the effect of context on intervention effects, the chapter aims to answer the following research questions:

(4) *Research questions*
    RQ1. What characterizes a context that voids intervention effects?
    RQ2. Why does this contextual property void intervention effects?
    RQ3. What data variation can the contextual property account for?

I propose that the type of context that voids intervention effects is one that makes the entire *wh*-in-situ question 'given' according to the framework of Büring (2016). I call this 'Maximally Given'. I suggest that in such a context, a contextually supplied choice function is available (cf. Kratzer (1998) for specific indefinites). Maximal Givenness allows for recoverability of the choice function. The contextually supplied choice function provides an alternative for covert movement, circumventing the intervention effects configuration. I show that the proposal explains both variation among interveners and among sentences with the same intervener, as well as the absence of intervention effects in echo questions.

The chapter has the following structure. In Section 2, I lay out the data regarding intervention effects in French *wh*-in-situ questions, focussing on the variation and the role of context. Section 3 discusses Baunaz's account regarding the influence of context on intervention effects (Baunaz 2005; 2011; 2016, building on Starke 2001). In Section 4, I propose a generalisation regarding the type of context that voids intervention effects, answering RQ1. I lay out the proposed explanation for why the generalisation holds, i.e. the contextually supplied choice function, in Section 5 (RQ2). In Section 6, I discuss the variation that is accounted for by the proposal (RQ3). I show that the proposed analysis also covers the absence of intervention effects in echo questions in Section 7. The chapter is concluded in Section 8.

2   The relevant data

This section discusses some empirical claims that have been made in the literature on intervention effects in French *wh*-in-situ questions. I provide a brief overview of the expressions that have been said to intervene (Section 2.1). Then, I discuss some variation that is attested in the data (Section 2.2). Finally, I discuss the observation that context may influence the relevant judgments (Section 2.3).

2.1   Interveners

It is not yet clear what exactly constitutes the class of potential interveners in French *wh*-in-situ questions. Many expressions have been claimed to intervene, but the data are often not conclusive. An expression that is regarded as an intervener by one author, is sometimes not considered to intervene by another (see also Section 5 in Chapter 2). Moreover, the expressions that are claimed to be interveners do not apparently form a well-defined category. I have attempted a classification in Table 1 below. It lists the expressions that have been mentioned by at least one publication in the relevant literature as an intervener; a list of the publications is included as Appendix C. (The symbol '^' in the table marks the expressions that receive only very few mentions in the literature.) It is quite possible that there are expressions that intervene, but are not listed in the table, as it contains the potential interveners that have been described as such to date.

Table 1. The expressions that have been mentioned in the literature as interveners[38]

CATEGORY	INTERVENERS
Negation	*pas* 'not'; *personne* 'nobody'; *jamais*^ 'never'; *aucun N*^ 'no N'; *aucun des N*^ 'none of the N'
Universal	*tous les N* 'all the N'; *tout le monde* 'everybody'; *toujours* 'always'; floating *tous* 'all' *chacun des N* 'each of the N'; *chacun* 'each' (non-floating); *chaque N*^ 'each N'; floating *chacun*^ 'each'
Focus expression	*seulement X* 'only X'; *seul X*^ 'only X'; *même X*^ 'even X'; contrastive focus
Indefinite expression	*plusieurs N* 'several N'; *la plupart des N*^ 'most of the N'; *plus de cinq N*^ 'more than five N'; *exactement cinq N*^ 'exactly five N'; *certains N*^ 'certain N'; *un N*^ 'an N'; *quelqu'un*^ 'someone'
Frequency adverb	*souvent* 'often'
Degree quantifier	*beaucoup*^ 'a lot'; *trop*^ 'too much'; *peu*^ 'little'
Wh-phrase	with intermediate *wh*-phrase; with *si* 'whether'

2.2 Data variation

The data regarding the potential interveners in Table 1 give rise to several types of variation. There are differences among interveners. There is also

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[38] Chang (1997: 63), cited by Cheng & Rooryck (2000), claims that modal verbs also constitute interveners. However, other authors have repeatedly denied this (Adli 2004; 2006; Beyssade 2006; Boucher 2010; Hamlaoui 2011). I therefore do not list modal verbs in the table. See also Starke (2001: 24), who mentions that modals can actually improve judgments.

variation in judgments concerning sentences with the same intervener, even with identical sentences.

For some interveners, such as expressions associating with focus, it has not been disputed that they cause intervention effects (5).

(5) *_Seulement Jean_   arrive   à   faire quoi ?
      only   Jean   arrives to do   what
      Intended: 'What does only JEAN manage to do?'

[Mathieu 1999: 447, ex. 12a]

Yet for other expressions, their status as interveners is controversial. This is particularly the case for _pas_ 'not' and several universal quantifiers (_toujours_ 'always', _tous les N_ 'all the N'_, tout le monde_ 'everybody' and floating _tous_ 'all'). The examples in (6) and (7) display contradictory judgments of sentences with the same intervener.

(6) a. *Tu ne fais _pas_ quoi ce   soir?
        you NE do   not what this evening
        Intended: 'What aren't you doing tonight?'

   b. Il (ne) doit _pas_ toucher qui ?
        he NE must not touch   who
        'Who mustn't he touch?'

[Mathieu 2002: 35, ex. 2a / Adli 2006: 177, ex. 9a]

(7) a. *_Tout le   monde_ a   vu   quoi ?
        all   the world   has seen what
        Intended: 'What did everyone see?'

   b. Et   à cette fête, à ton   avis,
        and at this   party in your opinion

        tout le   monde a   embrassé qui ?
        all   the world   has   kissed   whom

        'And at this party, in your opinion, whom did everybody kiss?'

[Mathieu 1999: 464, ex. 45b / adapted from Poletto & Pollock 2015: 86, ex. 20a]

There is even variation in judgments of identical sentences, as is shown in (8), (9) and (10).[39]

(8) (*) Il (n') a   *pas* rencontré qui ?
       he NE has not met   who
       'Whom didn't he meet?'

[✓Adli 2004: 203, ex. 3a / *Chang 1997: 63, ex. 34a]

(9) (*) *Tous les étudiants* ont   rencontré qui ?
       all   the students have met   who
       'Whom did all the students meet?'

[✓Beyssade 2006: 182, ex. 15a / *Chang 1997: 60, ex. 27a]

(10) (*) Jean / il admire *toujours* qui ?
        Jean he admires always   who
        'Who does Jean/he always admire?'

[✓Beyssade 2006: 182, ex. 15e / *Chang 1997: 63, ex. 34c]

In short, the data display at least two kinds of variation: among different interveners and among sentences with the same intervener, including identical sentences.

2.3   The effect of context

What may cause this variation? An important factor that seems to influence acceptability is the context in which the question is uttered. The interveners for which this has been observed most clearly are *plusieurs N* 'several N', universals like *tous les N* 'all the N' and *pas* 'not' (Adli 2004; 2006; Baunaz 2005; 2011; 2016; Beyssade 2006; Boucher 2010b; Engdahl 2006; Starke 2001).

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[39] At first sight, these examples seem to reflect a difference between French as spoken in France and that which is spoken in Canada. However, the issue is more complicated and I will return to it in Chapter 6.

A question with an intervener, which is judged infelicitous in isolation, may be acceptable with context (Starke 2001). This was demonstrated in (3) and (3'), which are repeated here as (11) and (11').

(11) *_Tous les témoins_   ont   reconnu   qui ?
     all   the witnesses have recognized who
     'Whom did all the witnesses recognize?'

(11') During a trial, witnesses and defendants are confronted. One of the defendants has been accused unanimously. The journalist asks:

Et _tous les témoins_ ont reconnu qui ?

[Baunaz 2016: 157, ex. 40b]

Such data have led to seemingly opposing views in the literature. Some authors claim that French _wh_-in-situ questions do not display intervention effects: one must simply provide an appropriate context for the sentence not to appear odd (Adli 2004; 2006; Beyssade 2006). Other authors maintain that intervention effects occur in French _wh_-in-situ questions, but that they disappear in a particular type of context (Starke 2001; Baunaz 2005; 2011; 2016). These two points of view appear contradictory, but are similar in the sense that they both imply that certain sentences are only felicitous in a particular context.

The observation that a particular context can improve judgments may also be relevant for sentences presented to informants in isolation. In that situation, an informant is free to construe his/her own context. Since some contexts void intervention effects, this may lead to variation in judgments. One speaker may envisage another context or a more elaborate one than another. Some speakers may be very good at quickly construing the relevant context, which predicts that they accept questions with interveners more easily. Speakers may even envisage different contexts from one moment to another.

What is it about context that may void intervention effects? An indication comes from an observation made by both Engdahl (2006) and Beyssade (2006). As they show, a question containing _pas_ 'not' is

acceptable in a context that already contains the negation, as in (12). (The example is not acceptable to all speakers, to which I come back below.)

(12) Speaker A has just complained that her children are rather picky about what they eat.

    A: Mon fils ne mange pas de poisson.
       my   son NE eats   not of fish
       'My son doesn't eat fish.'

    B: Et   ta   fille,   elle ne mange *pas* quoi ?
       and your daughter she NE eats   not what
       'What about your daughter? What doesn't she eat?'

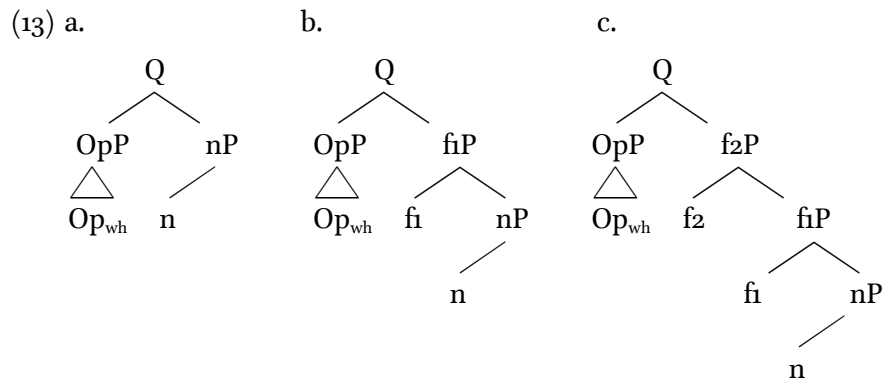   [Engdahl 2006: 100, ex. 23; cf. Beyssade 2006: 182, ex. 17b]

Beyssade calls this a 'negative discourse theme' (p.182); Engdahl mentions that 'the negative proposition has to be part of the dialogue participants' ground' (p.100).

    An elaborate account of the relation between intervention effects and context, which goes in a different direction, was proposed by Baunaz (2005; 2011; 2016), building on Starke (2001). I discuss this in the next section, before presenting my own proposal in Sections 4, 5 and 6.
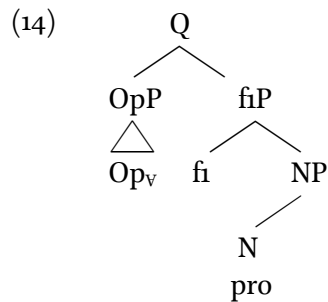
3 Previous approach: nanosyntax and Relativized Minimality

Baunaz (2005; 2011; 2016) assumes a nanosyntactic approach to grammar. In nanosyntax, a syntactic head equals a feature and a morpheme can spell out several features at once. A lexical entry, for instance *qui* 'who', can lexicalise feature trees of different sizes. In other words, there can be different variants of *qui* 'who', which have different feature make-ups. This is illustrated in (13), which is based on the most recent version of Baunaz's proposal (Baunaz 2016). All three feature trees in (13) are lexicalisations of *qui* 'who'. In (13), *Q* stands for 'Quantificational', Op_{wh} is a null operator and *n* is a nominal feature. *f1* and *f2* represent 'partitivity'

and 'specificity' respectively, which are features with semantic functions that I Introduce below. The features in the trees are ordered in a fixed hierarchy. As is shown in (13), all three variants of *qui* 'who' contain a nominal element and an operator, but *qui* 'who' does not always contain *f1* or *f2*.

(13) a.   b.   c.

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          Q                          Q                          Q
         / \                        / \                        / \
      OpP   nP                   OpP   f1P                   OpP   f2P
      /\    /                    /\    / \                   /\    / \
     △     n                    △     f1  nP                △     f2  f1P
   Op_wh  n                   Op_wh  f1   /                Op_wh f2   / \
                                         n                          f1  nP
                                                                        /
                                                                       n
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Baunaz takes expressions that intervene to be composed of similar features as one of the trees in (13). I display Baunaz's (2016) representation of *tous* 'all' as an example (14).

(14)

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              Q
             / \
          OpP   f1P
          /\    / \
         △     f1  NP
        Op_v  f1   /
                  N
                 pro
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Crucially, *tous* 'all' is also a quantificational element that contains f1.

Now recall the intervention effects configuration as presented in (2), repeated here as (15).

(15) [$_{CP}$ ... intervener ... *wh*-phrase]
                                        COVERT
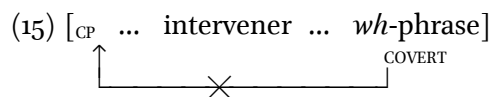
Baunaz also assumes that intervention effects arise when an intervener blocks non-visible movement of the *wh*-phrase. Her explanation, following Starke (2001), is that movement is blocked by features of the same class, i.e. feature-based Relativized Minimality (Rizzi 2004). *Wh*-phrases and interveners both belong to the class of quantificational elements *Q*. Therefore, an in-situ *wh*-phrase with the feature labelled f1 (cf. (13b) or (13c)) can cross an intervener without the feature f1, but not an intervener that also has this feature, i.e., an intervener with the feature f1 or with the features f1 and f2. Baunaz (2016: 164) states that a *wh*-phrase "that has something more than a potential intervener is free to move, whereas a [*wh*-phrase] that has either something less, or that has a similar feature composition as a potential intervener, will be blocked." Consequently, an in-situ *qui* 'who' with the feature composition in (13b) cannot move past *tous* 'all' in (14), because they both have the feature labelled f1. The *qui* 'who' in (13a) can also not move past *tous* 'all'. Only the *qui* 'who' in (13c) can do so, because it has 'something more' than *tous* 'all', namely the feature labelled f2. In other words, *tous* 'all' induces intervention effects for two of the three variants of *qui* 'who'. More generally, an expression that induces intervention effects for one type of *qui* 'who', might not block movement of another type of *qui* 'who'. (I discuss some other interveners in Section 6.1 below.) The feature composition of the *wh*-phrase and that of the potential intervener together determine whether a sentence will display intervention effects.

The features that I have so far called f1 and f2 represent semantico-pragmatic meanings that relate to the kind of context in which a *wh*-phrase can be used. That is how Baunaz accounts for the influence of context. The feature labelled f1 corresponds to Baunaz's (2011; 2016) 'partitivity' (a feature 'part' dominated by a phrase 'partP').[40] A partitive *wh*-phrase can be used in a context as in (16), which mentions a pre-established set of prizes.

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[40] It is called 'range' by Baunaz (2005) and Starke (2001).

(16) During the end-of-year party, various prizes were awarded to the best
    students: maths, English, French, physics, etc. This year, all the
    students got a prize. After the party, the dean's wife asks her husband:

    *_Tous les étudiants_ ont   reçu   quoi / quel   prix ?
      all   the students   have received what which prize
      Intended: 'What/which prize did all the students receive?'

                                                [adapted from Baunaz 2016: 156, ex. 39b]

Partitivity resembles Pesetsky's (1987) D-linking or Cinque's (1990)
referentiality in that the value to fill a partitive _wh_-phrase belongs to a
pre-established set (cf. Enç' 1991 'partitive specifics'). As the context in (16)
licenses a partitive _wh_-phrase, which cannot cross the partitive intervener
tous les N 'all the N', the question is unacceptable in this context.

    The feature I referred to as f2 is Baunaz's 'specificity' (a feature 'spec'
dominated by a phrase 'specP'). A specific _wh_-phrase is felicitous in a
context like (3'), repeated as (17), in which it is already known that there is
a defendant who has been accused (i.e. recognized) by all the witnesses.

(17) During a trial, witnesses and defendants are confronted. One of the
    defendants has been accused unanimously. The journalist asks:

    Et _tous les témoins_   ont   reconnu   qui ?
    and all   the witnesses have recognized who
    'And whom did all the witnesses recognize?'

                                                [Baunaz 2016: 157, ex. 40b]

The answer to this question makes reference to an individual that is
already familiar; the journalist merely asks for the identity of the
individual. So a question with a specific _wh_-phrase presupposes the
existence of a particular antecedent for the _wh_-phrase. According to
Baunaz, the speaker infers that the interlocutor has such an individual in
mind. The question in (17) is acceptable because the context licenses a
specific _wh_-phrase (i.e. with the feature specific), which can cross a
partitive intervener like _tous les N_ 'all the N' (without the feature specific)
(see Section 6.1 for explanations about the assumed properties of different

interveners). Baunaz and Patin (2011) note that prosodically, a specific *wh*-word may be marked by an accent, but they noted this accent only in 54% of the cases.

Partitivity and specificity are presuppositions in Baunaz' proposal. For instance, partitivity presupposes the existence of a pre-established set. Baunaz calls a *wh*-phrase without either the feature specific or the feature partitive a 'non-presuppositional' *wh*-phrase (cf. (13a)). Such a *wh*-phrase does not require a particular type of context. As all interveners including non-presuppositional ones contain the feature 'Q', a non-presuppositional intervener still causes intervention effects in the presence of a non-presuppositional *wh*-phrase, which also contains Q.

Baunaz's (2005; 2011; 2016) work presents some important insights regarding the relation between context and intervention effects. Elaborating on Starke's (2001) work, she notes that context can void intervention effects and provides several examples. Her proposal accounts for the influence of context (a *wh*-phrase that can cross an intervener presupposes a particular type of context). It also explains the observed variation among different interveners (interveners differ in their feature compositions).

However, the features of the different interveners to some extent have to be stipulated. To my understanding, the status of the negative intervener *pas* 'not' as non-presuppositional is only based on the occurrence of intervention effects in different types of context. As this is exactly what the account seeks to explain, the proposal is circular in this respect. The status of the universal quantifiers *tous* (*les N*) 'all (the N)' as partitive and *chacun* (*des N*) 'each (of the N)' as specific is motivated independently, but I have reservations about this motivation, since the differences between these quantifiers can receive an alternative explanation (see Section 6.1). In addition, Table 1 in Section 2.1 displays a rather long list of items that have been claimed to be interveners. If Baunaz's proposal is to be extended to these interveners, they would all have to be shown to involve the relevant features.

In the next sections, I present an alternative proposal. Like Baunaz's proposal, it accounts for the observation that context can void intervention effects and for the variation among different interveners. Yet

it has a few advantages. First, there is no need to stipulate the presence of features on interveners. As I show in Section 6.1, the proposal can explain the data without assuming that there are three different classes of interveners. In addition, the proposal accounts for more of the observed variation, namely also for variation among sentences with the same intervener (Section 6.2). There is also no need to represent presupposition, a semantico-pragmatic notion, as a nanosyntactic feature within lexical items. Finally, as I will show in the next chapter, the proposal also accounts for several observations regarding *wh*-in-situ questions in languages like English and echo questions, i.e. beyond intervention effects.

4   Proposed generalisation: Maximal Givenness

I begin by examining what characterizes a context that voids intervention effects, cf. the first research question (RQ1), before considering why certain contexts may void intervention effects (RQ2) in the next section.

Recall the example about the trial in (17) above. As pointed out by Baunaz (2011; 2016), the context of (17) establishes the existence of a certain referent for the *wh*-phrase. There is a defendant who has been accused (and therefore recognized) unanimously, i.e. by all the witnesses. The *wh*-in-situ question merely asks to further specify the identity of this defendant. Let's assume that the accused defendant is defendant number 1, who is called monsieur Bisset, and that he is sitting on the left. In that case, possible answers to the question could be that all the witnesses recognized defendant number 1, that they all recognized monsieur Bisset, or that they all recognized the defendant on the left. The definite descriptions 'defendant number 1', 'monsieur Bisset' and 'the defendant on the left' would all refer to the same referent, which is the defendant who has been unanimously accused. The referent in the context and the one in the answer are the same. This means that the context entails the answer to the question. This is displayed in (18), where phrases with the same index refer to the same referent.

(18) context: [a specific defendant]$_i$ has been accused unanimously,
               i.e. by all the witnesses

               entails

    answer: all the witnesses recognized [monsieur Bisset]$_i$ or
               all the witnesses recognized [defendant number 1]$_i$ or
               all the witnesses recognized [the defendant on the left]$_i$

When the context entails the answer to the question, the question can be paraphrased using a definite description as in (19) (in English).

(19) The defendant who has been recognized by all the witnesses
   – who is it?

This is because the specific referent of the *wh*-phrase has already been fixed by the context. The generalisation I will propose in this section is that a context that voids intervention effects is one that entails the answer to the question as in (18) and (19). For this to be the case, the context must establish the existence of a specific referent for the *wh*-phrase, cf. Baunaz's specificity.

    A second example in which the context voids intervention effects and entails the answer to the question is shown in (20). Note the underlined sentence in the context, which states that Claire could not use all the machines.

(20) Claire is a regular at Rainbow gym. She goes there 3 times a week. As it is usually the case in these infrastructures, she has a coach. Her coach usually prepares a plan for the day, i.e., she needs to use all the machines listed. That day Claire is a bit tired and she practices slower than usual. At the end of the session, she goes to the coach and tells him that <u>she could not use all the machines</u>. The coach, who wanted to prepare the next session is a bit angry. He asks:

Bon, t'   as   *pas* utilisé quelle machine ?
well you have not   used   which machine
'Well, which machine didn't you use?'

[Baunaz 2016: 154-155, ex. 35, underlining mine]

The context in (20) establishes that there is at least one machine that Claire did not use. It allows for the interpretation that Claire means she has not used a specific machine.[41] On this interpretation, the coach hears that Claire has not used a specific machine and enquires which one it is. That is, the coach asks for further information about the known referent (machine), namely its identity, like in the previous example. An answer to the question such as *machine 4* refers to this known machine, the one with the property that Claire did not use it. Therefore, this context, which voids intervention effects, also entails the answer to the question, as is shown in (21).

(21) context: Claire did not use [a specific machine]$_i$

    entails

    answer: Claire did not use [machine 4]$_i$

The question can therefore be paraphrased as in (22).

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[41] In spoken French, *quelle*(*s*) *machine*(*s*) can also have a plural reference, as the plural marking *s* is not audible. One could also assume that the coach leaves in the middle whether the cardinality of a specific set of machines is one or more than one, in which case the phrase *quelle*(*s*) *machine*(*s*) is number neutral.

(22) The machine that you did not use – which is it?

I will now discuss two examples in which the context does not void intervention effects, to clarify the contextual property that is responsible for the effect. The first example is presented in (23).

(23) Tom is the family globe trotter. He travelled all around the world for more than 20 years. During a family supper, his curious niece presents him a map of the world, with a list of names of all the countries in the world. She asks him:

??Tonton Tom, t'   es   *pas* allé   où ?
uncle   Tom you are not gone where
Intended: 'Uncle Tom, where didn't you go?'

[Baunaz 2016: 155, ex. 36a]

While the context in (17) above makes salient a specific defendant who has been accused by all the witnesses and the one in (20) a specific machine that Claire did not use, the context in (23) does not establish the existence of specific places that uncle Tom did not visit. What the context makes salient is that uncle Tom visited many places all over the world, but the intervener *pas* 'not' does not feature in the context. As a result, there is no referent in the preceding discourse corresponding to 'the countries where uncle Tom did not go'. Therefore the context does not entail the answer to the question and the question cannot be paraphrased as in (24).

(24) The countries where you did not go – what are they?

This example shows that the intervener itself must be present in the context, cf. Engdahl (2006) and Beyssade (2006).

A second example in which the context does not void intervention effects was presented in (16) and is repeated as (25).

(25) During the end-of-year party, various prizes were awarded to the best
     students: maths, English, French, physics, etc. This year, all the
     students got a prize. After the party, the dean's wife asks her
     husband:

     Tous les étudiants ont   reçu   quoi / quel   prix?
     all   the students   have received what which prize
     Intended: 'What/which prize did all the students receive?'

                                        [adapted from Baunaz 2016: 156, ex. 39b]

The context in (25) does mention the intervener *tous les étudiants* 'all the
students', but the *wh*-in-situ question is not acceptable on the relevant
scope reading, so this is clearly not the only requirement. The problem
seems to be that the context does not entail the answer to the question
because the scope is wrong. The context mentions a set of prizes (maths,
English, etc.) and makes salient that all the students got a (different)
prize. Yet, there is not a specific prize mentioned in the context that is
such that all the students received it. As a result, the context does not
entail the answer to the question and the question cannot be paraphrased
as in (26).

(26) The prize that all the students received – what/which one is it?

   I therefore propose that a context that voids intervention effects is
one that entails the answer to the question. For this to be the case, the
context should establish the existence of a specific referent for the *wh*-
phrase, cf. Baunaz's specificity. (Note that Baunaz's partitivity does not
play any role here.) Importantly, the context must make salient the
existence of a specific referent *with the property* as mentioned in the
question, e.g. a person with the property of having been recognized by all
the witnesses in (17). The property crucially includes the intervener (in
the right scope configuration).
   I phrase this generalisation regarding the contexts that void
intervention effects in terms of the information structure of the question.
More specifically, I employ Büring's (2016) 'givenness', which was

introduced in Section 1.3 of Chapter 3. In example (27), *the singer* is given, because the referent 'Frank Sinatra' is contextually salient.

(27) Sinatra's reputation among industry musicians grew swiftly, and
      James always supPORted [the singer]_G.

               [Büring 2016: 18, ex. 1]

Chapter 3 presented the definition of givenness in (28).

(28) An expression is given if (following existential type shifting)
      there is a CSM that entails it.

Recall that *CSM* stands for 'Contextually Salient Meaning', in other words, a meaning that is salient in the context, like 'Frank Sinatra' in (27). The notion of existential type shifting is not relevant for the present purpose, as I will only be dealing with propositions.[42] My definition of a CSM, as presented in Section 1.4 of Chapter 3, is given in (29).

(29) *Contextually Salient Meaning (CSM) – my definition*
      A meaning is a CSM if it is perceived by the speaker as contextually
      salient and the speaker has no reason to believe that it is not salient
      for the addressee.

This states that a CSM is a subjective notion: a CSM is what the speaker perceives as contextually salient. Therefore, as I explained in Chapter 3, a context may also make certain associations salient. Still, the interlocutor is also relevant, as the speaker should have no reason to believe that the CSM is not salient for the addressee.

 The generalisation I propose regarding French *wh*-in-situ questions is that intervention effects are voided when the entire *wh*-in-situ question is

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[42] Existential type shifting turns expressions which are not propositions, into propositions. This is needed because entailment is a relation between two propositions, yet expressions of any type can be given.

given. I call this 'Maximally Given'. This 'Intervention effects avoidance generalisation' is presented in (30).

(30) *Intervention effects avoidance generalisation*
     Intervention effects are voided when the *wh*-in-situ question is
     Maximally Given.

The generalisation in (30) states that intervention effects are voided when the *wh*-in-situ question is Maximally Given, i.e., when a CSM entails the entire *wh*-in-situ question (cf. (28) above). Yet, entailment is a relation between propositions. A *wh*-question is not a proposition, but a set of propositions (Hamblin 1973). So, when does a CSM entail the meaning of a *wh*-in-situ question? I assume that a *wh*-question is entailed if the answer to the question is entailed. I therefore define Maximal Givenness as in (31).

(31) *Maximal Givenness*
     A *wh*-in-situ question is Maximally Given if a Contextually Salient
     Meaning (CSM) entails the answer to the question.

For instance, I mentioned above that the context must make salient the existence of a specific referent as determined in the question; that is the relevant CSM. In (17) above, the CSM is therefore 'a specific defendant has been accused unanimously by all the witnesses'. As was shown in (18), this entails the answer to the question, e.g. 'all the witnesses recognized defendant number 1', if the specific defendant in the context and defendant number 1 have the same reference. As there is a CSM that entails the answer to the question, the *wh*-in-situ question is Maximally Given, which I suggest is what voids intervention effects. The possibility to paraphrase the *wh*-in-situ question using a definite description corresponding to a contextually given referent, as in (19) above, can be used as a convenient test to establish Maximal Givenness. In other words, the *wh*-in-situ question in (17) is Maximally Given because there is a CSM that entails the answer to it, which is conveniently tested by paraphrasing the question using a definite description as in (19). According to the

Intervention effects avoidance generalisation in (30), intervention effects are voided in precisely such a context.

While the Intervention effects avoidance generalisation resembles specificity as proposed by Starke (2001) and Baunaz (2005; 2011; 2016), it should be noted that Maximal Givenness is a property of the *wh*-in-situ question as a whole (its information structure), rather than just the *wh*-phrase (its feature composition). Moreover, I do not assume a hierarchy of *wh*-phrases and interveners; partitivity does not play a role. It is not the combination of the *wh*-phrase and the intervener that determines if intervention effects arise (Relativized Minimality). Rather, an intervener is always an intervener. In the next section, I propose that the type of context that voids intervention effects relates to an alternative for covert movement.

5 Proposed explanation:
a contextually supplied choice function

Why are intervention effects voided when the *wh*-in-situ question is Maximally Given (RQ2)? In a nutshell, the explanation I propose is as follows. Recall from Section 1 my assumption that intervention effects arise when an intervener blocks covert movement of the *wh*-phrase. I suggest that when a French *wh*-in-situ question is Maximally Given and does not display intervention effects, there is an alternative to covert movement. That is, rather than via covert movement, the in-situ *wh*-phrase is interpreted via a contextually supplied choice function (cf. Kratzer 1998 for specific indefinites). As there is no covert movement, intervention effects do not arise. I suggest that the choice function is only available when the question is Maximally Given because Maximal Givenness makes the choice function recoverable for the interlocutor. The representation with a choice function is displayed in (32), where I use the question in (17) above as an example.

(32) Representation of a Maximally Given *wh*-in-situ question
    ex. *tous les témoins ont reconnu qui* in (17)

    ⟦tous les témoins ont reconnu qui ⟧=
    {p | p = all the witnesses have recognized CH(person)}

The representation in (32) displays a singleton-set of propositions, in which the in-situ *wh*-phrase is represented by a choice function *CH*, which ranges over the set of persons (corresponding to the *wh*-phrase *qui* 'who'). I assume that a *wh*-question contains a question operator in CP, which turns the meaning of the IP it combines with into a singleton-set containing this meaning, cf. Heim's (2000) interpretation of Karttunen (1977). Taking (32) as an example, the question operator turns the proposition in (33a) into the set containing that proposition in (33b).

(33) a. 'all the witnesses have recognized CH(person)'
     b. {p | p = all the witnesses have recognized CH(person)}

The choice function I assume is a variable that is not bound by an existential quantifier; rather, its value is supplied by the context (cf. Kratzer 1998). The context in (17) mentions a specific person (defendant) who has been accused unanimously. This makes the choice function variable in (32, 33) recoverable. The fact that the context supplies a value for the choice function is a condition on its use. Only then, the interlocutor is able to identify the referent for the *wh*-phrase. In what follows, I explain the proposal in more detail. I elaborate on Kratzer's (1998) contextually supplied choice function, the relation I assume with Maximal Givenness and the fact that a question escaping intervention effects has a non-standard meaning.

A choice function is a function that applies to a non-empty set and yields an individual member of the set (Reinhart 1998; Winter 1997). Reinhart (1998) introduces the idea that a choice function can be used to interpret an in-situ *wh*-phrase. For instance, an in-situ *wh*-phrase like *which book* can be represented by a choice function that applies to the set of books and selects one book. The same representation is assumed for *wh*-phrases where the restriction is implicit, like *who*. A choice function

denoting *who* applies to the set of persons and selects one person from the set.

The choice function variable proposed by Reinhart (1998) is bound by an existential operator. In contrast, the interpretation of the choice function variable assumed by Kratzer (1998) is supplied by the context (see Kratzer (1998) for a choice function analysis of specific indefinites like *a certain* and *some*). In Kratzer's proposal, the choice function is a free variable and the context of use determines its value, as in the case of an unbound pronoun.[43]

In the case of an unbound pronoun like *she* in *She has just arrived*, the contextually supplied value should be recoverable for the interlocutor as well as the speaker (Breheny 2003; see also Yanovich 2005). If the interlocutor cannot identify this value, the communication fails. Under my proposal, the same is true for the choice function variable that represents an in-situ *wh*-phrase. If the speaker can identify the referent but the interlocutor cannot, the communication will fail, as the interlocutor will not be able to provide an answer to the question. The difference between my proposal and the case of unbound pronouns stems from the assumed presence of a question operator. As I mentioned above, I assume that a question operator (which is also present in other *wh*-questions) turns the simple proposition in (33a) into the singleton-set of propositions in (33b), thus yielding a question interpretation. Crucially, I assume that the reason why the choice function is only available in questions that are Maximally Given is that the interlocutor must be able to identify the contextually supplied value. Maximal Givenness is what

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[43] Kratzer's (1998) contextually supplied choice function has been criticised by Breheny (2003) and Yanovich (2005), but this mainly concerns the implicit argument that Kratzer uses to take care of specific indefinites like *a certain*. Yet, my proposal here does not employ this implicit argument. The implicit argument is used by Kratzer (1998) to model the intuition that a phrase like *a certain woman* refers to the woman that the speaker has in mind. She suggests that the implicit argument may refer to the speaker. Breheny (2003) and Yanovich (2005) argue that the intuition concerning *a certain* cannot be modelled in this way. In my proposal, the referent for the in-situ *wh*-phrase should be known to both speaker and interlocutor, as in the case of an unbound pronoun, contrasting with a specific indefinite like *a certain*.

makes the referent for the in-situ *wh*-phrase recoverable for the interlocutor. Consider again the question in the context in (17), repeated here as (34).

(34) During a trial, witnesses and defendants are confronted. One of the defendants has been accused unanimously. The journalist asks:

Et   *tous les témoins*   ont   reconnu   qui ?
and all   the witnesses   have recognized who
'And whom did all the witnesses recognize?'

[Baunaz 2016: 157, ex. 40b]

The context in (34) introduces a specific referent corresponding to a 'person whom all the witnesses recognized'. This provides the information needed to interpret the contextually bound choice function, which yields this same referent when applied to the set of persons. The interlocutor is therefore able to identify the referent for the *wh*-phrase. Yet suppose that the context would only provide the information in the first sentence (i.e. up until *confronted*). The context would then make salient the existence of several persons: witnesses, defendants and by implication other people involved in a trial, like a judge. Under such a context, it is not so clear what value the choice function takes and *CH*(*person*) cannot be identified. As the choice function interpretation is not available, covert movement is needed. This yields the intervention effects configuration, so the question becomes infelicitous. I therefore suggest that if the question is not Maximally Given, the context cannot supply an unambiguous value for the choice function and the choice function is not recoverable for the interlocutor in that context.[44]

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[44] In a context that makes salient *Nobody admired anyone*, an answer like *Nobody admired Jean* is entailed. However, in such a context, a choice function would still not be recoverable, as the relevant referent is not identifiable. This shows that Maximal Givenness is a necessary but not a sufficient condition for recoverability of a choice function in downward entailing contexts.

The meaning of a *wh*-question is normally a set of alternative propositions (Hamblin 1973). In case of (covert) *wh*-movement, the trace that is left behind by the moved *wh*-phrase can be interpreted as a variable. It is bound by the moved *wh*-phrase, which existentially binds the variable. The alternatives in the set arise from different values that can be attributed to the variable (cf. Karttunen 1977). Yet, I have suggested that in questions containing the choice function, there is no (covert) movement. So how does the meaning of a set of alternatives come about?

In fact, as predicted by the absence of covert movement, the meaning of a Maximally Given question does not yield alternatives. The referent for the *wh*-phrase is fixed. In (34), it is the particular defendant who has been recognized by all the witnesses. The question does not ask what person (out of a set of alternatives) was recognized by all the witnesses, which would result in a set of alternative answers. Instead, the question asks for more information about the identity of the given referent, in this case the person who has been recognized. The meaning of a question like (33) is therefore different from that of a regular *wh*-question.

In Section 4 above, I mentioned that the potential answers to a question like (33) are definite descriptions of the same referent. For instance, the potential answers listed in (18), repeated here as (35), refer to the same defendant.

(35) context: [a specific defendant]$_i$ has been accused unanimously,
              i.e. by all the witnesses

       entails

   answer: all the witnesses recognized [monsieur Bisset]$_i$ or
            all the witnesses recognized [defendant number 1]$_i$ or
            all the witnesses recognized [the defendant on the left]$_i$

These different ways to refer to one referent should be distinguished from the set of possible answers in a regular *wh*-question. In a regular *wh*-question like *whom did all the witnesses recognize?*, the set of possible answers is as in (36). This is a set of alternative propositions, which features a different referent in each answer.

(36) {p | p = all the witnesses recognized defendant number 1,
        all the witnesses recognized defendant number 2,
        all the witnesses recognized defendant number 3, ...}

Note that each of the answers listed in (36) might also receive alternative wordings. The fact that there are multiple ways to formulate an alternative in the set is a separate issue and in this dissertation, I do not deal with the status of these possible variants. The point I wish to make is that since the answers in (35) refer to the same referent, the denotation of the question in (33) should be seen as a singleton-set, a set containing only one proposition, which contrasts with a set of alternative propositions as in (36). The denotation of a singleton-set of propositions corresponds to the non-standard interpretation of a question as in (33). It still contrasts with the denotation of a declarative in that (33) denotes a set rather than a simple proposition. As explained above, I assume that the difference is due to the presence of a question operator, which is not present in a declarative.

The lack of covert movement thus explains the non-standard interpretation of a Maximally Given *wh*-in-situ question. Since there is no movement that creates alternatives, the meaning of a *wh*-in-situ question that contains an intervener is a singleton-set of one proposition. This is in accordance with the contexts in which it can be used, which need to make the *wh*-in situ question Maximally Given.

Summarising this section, I adopt Kratzer's (1998) contextually supplied choice function and apply it to *wh*-in-situ questions. When the choice function is present, there is no covert movement and intervention effects do not arise. I suggest that the choice function is only available when the question is Maximally Given because Maximal Givenness is what licenses recoverability of the choice function. That is, Maximal Givenness makes the choice function, and hence the referent for the *wh*-phrase, recoverable for the interlocutor. As choice functions do not yield alternatives, a Maximally Given *wh*-question does not involve alternative propositions. This prediction seems to be born out, as evidenced by the non-standard question interpretation.

6   Explained data variation

I now turn to the final research question (RQ3), the question what data variation Maximal Givenness can account for. I discuss in this respect variation among interveners (Section 6.1) and variation among sentences with the same intervener (Section 6.2).

6.1   Variation among interveners

The first type of variation that can be explained by Maximal Givenness is variation among interveners. Recall from Section 3 that Baunaz (2005; 2011; 2016), building on Starke (2001), accounts for this variation by assuming differences in the interveners' feature compositions. Baunaz assumes a hierarchy of interveners, namely specific, partitive and non-presuppositional. In this section, I firstly discuss the examples that Baunaz offers in support of the idea that the interveners *tous les N* 'all the N', *chacun des N* 'each of the N' and *pas* 'not' belong to three different classes, which are the interveners she discusses most elaborately.[45] I then show how Maximal Givenness can account for the same data without assuming the existence of these classes. Secondly, I lay out how variation among interveners is explained by Maximal Givenness.

Baunaz suggests that the universal quantifiers *tous les N* 'all the N' and *chacun des N* 'each of the N' display different properties, e.g., they are felicitous in different contexts (i.e. in declaratives) (Baunaz 2011; 2016). According to her, this is because *tous les N* 'all the N' is partitive and *chacun des N* 'each of the N' is specific. Baunaz's argumentation for the idea that the interveners *tous les N* 'all the N', *chacun des N* 'each of the N' and *pas* 'not' belong to three different classes of interveners then proceeds as follows.

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[45] According to Baunaz (2011), *personne* 'nobody' and *aucun des N* 'none of the N' are the negative counterparts of *tous les N* 'all the N' and *chacun des N* 'each of the N' respectively. She discusses these interveners too.

1. There is a contrast between *tous les N* 'all the N' as an intervener and *pas* 'not'. The context in (20), repeated here as (37), and the one in (16), repeated as (38), both license a partitive *wh*-phrase. While a question with *pas* 'not' is acceptable in a partitive context (37), a question with *tous les N* 'all the N' is not (38). Therefore, *pas* 'not' is a non-presuppositional intervener, in contrast to *tous les N* 'all the N'.

2. The intervener *tous les N* 'all the N' is however acceptable in a context that licenses a specific *wh*-phrase (39a), which confirms that it is a partitive intervener.

3. Yet the intervener *chacun des N* 'each of the N' is unacceptable in a context licensing a specific *wh*-phrase (39b), which confirms that it is a specific intervener, i.e. in contrast to *tous les N* 'all the N'.

(37) Claire is a regular at Rainbow gym. She goes there 3 times a week. As it is usually the case in these infrastructures, she has a coach. Her coach usually prepares a plan for the day, i.e., she needs to use all the machines listed. That day Claire is a bit tired and she practices slower than usual. At the end of the session, she goes to the coach and tells him that <u>she could not use all the machines</u>. The coach, who wanted to prepare the next session is a bit angry. He asks:

Bon, t'   as   *pas* utilisé quelle machine ?
well you have not   used   which machine
'Well, which machine didn't you use?'

[Baunaz 2016: 154-155, ex. 35, underlining mine]

(38) During the end-of-year party, various prizes were awarded to the best
students: maths, English, French, physics, etc. This year, all the
students got a prize. After the party, the dean's wife asks her
husband:

Tous les étudiants ont   reçu   quoi / quel   prix ?
all   the students have received what which prize
Intended: 'What/which prize did all the students receive?'

[adapted from Baunaz 2016: 156, ex. 39b]

(39) During a trial, witnesses and defendants are confronted. One of the
defendants has been accused unanimously. The journalist asks:

a. Et   *tous les témoins*   ont reconnu   qui ?
and all   the witnesses have recognized who
'And whom did all the witnesses recognize?'

b. *Et *chacun des   témoins* a   reconnu   qui ?
and each   of.the witnesses has recognized whom
Intended: 'And whom did each of the witnesses recognize?'
(with wide scope of the *wh*-phrase)

[Baunaz 2016: 157, ex. 40]

However, under the proposal presented above, each of these examples
can receive an alternative explanation that does not require the
assumption of three different classes of interveners. To start with step 1.,
the contrast between examples (37) and (38) can be attributed to the fact
that the context in (37) makes the *wh*-in-situ question Maximally Given,
while the context in (38) does not, as demonstrated in Section 4
(examples (21) and (22) versus (26)). Turning to step 2. in Baunaz's
argumentation, the sentence with *tous les N* 'all the N' in (39a) is
Maximally Given in that context. This has been demonstrated above in
(18) and (19). As to step 3., the fact that the sentence with *chacun des N*
'each of the N' is not acceptable in this context can be explained by the
distributive meaning of *chacun des N* 'each of the N', as discussed by Gil
(1995) and by Junker (1995: 145-146) for French. Since *chacun des N* 'each of

the N' is strongly distributive, the use of *chacun des N* 'each of the N' in
(39b) expresses that the event of recognizing a defendant happened
separately for each witness, rather than for the group of witnesses. This
enforces a reading of the sentence in which *chacun des N* 'each of the N'
takes scope over the *wh*-phrase: 'For each of the witnesses, whom did s/he
recognize?' The collective reading 'Whom (one person) did the witnesses
as a group recognize', i.e. *unanimously*, is not available due to the meaning
of *chacun des N* 'each of the N'. I suggest that this distributive property of
chacun des N 'each of the N' is what causes the contrast in (39). In sum,
the examples in Baunaz (2005; 2011; 2016) do not make it necessary to
assume three different classes of potential interveners. This follows from
Maximal Givenness in combination with independently motivated
properties of *chacun des N* 'each of the N'.

   I now lay out how Maximal Givenness can help us understand
variation among interveners. The context that comes to mind upon
reading a sentence depends on the sentence and an intervener is of
course part of the sentence. Crucially, for some interveners it is much
easier to envisage a context that makes the sentence Maximally Given
than for others.

   An example of an intervener where this is relatively easy is *plusieurs N*
'several N'. The sentence in (40) with this intervener was judged
acceptable (Adli 2006). (Adli mentions that the sentence was presented
with context, but does not report on the context itself.)

(40) *Plusieurs chênes* ont   été   coupé où ?
      several   oaks   have been cut   where
      'Where have several oaks been cut?'

                                                    [Adli 2006: 180, ex. 16a]

In order to make (40) Maximally Given, the context must make salient
that there is a specific place where several oak trees have been felled. The
speaker then inquires where this place is. It is not so hard to imagine such
a context, because the intervener *plusieurs N* 'several N' has a very general
meaning. If it is salient that oak trees have been felled at a specific place,

it is already almost salient that *several* oak trees have been felled at that place.

   In contrast to *plusieurs N* 'several N', it is harder to construe a context that makes a sentence with *plus de cinq N* 'more than five N' Maximally Given. The example in (41) was judged to be infelicitous (Mathieu 2002).

(41) **Plus   de   cinq étudiants* ont   fait   quoi ?
       more than five students   have done what
       Intended: 'What did more than five students do?'

[Mathieu 2002: 82, ex. 77a]

For (41) to be Maximally Given, the context must make salient that there is a particular thing that more than five students have done. It is not straightforward to come up with such a context, as *plus de cinq N* 'more than five N' imposes quite a specific restriction on the context. A context that makes salient that 'six' or 'part of the' students have done a specific thing does not make (41) Maximally Given. I suggest that (41) is judged to be unacceptable because it is difficult to envisage the necessary context. Nonetheless, a question with *plus de cinq N* 'more than five N' can be made felicitous given an appropriate context. Native speakers I consulted found the example in (42) perfectly acceptable.[46]

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[46] I would like to thank Romane Pedro and Marie Pedro for helping me to construct the relevant examples in French and to contact other native speakers.

(42) Une nouvelle réglementation stipule qu'un cours ne peut avoir lieu que si plus de cinq étudiants y sont inscrits. Résultat, il n'y a qu'un des cours de linguistique qui pourra avoir lieu.

'A new regulation states that a course can only take place if more than five students have registered. Now only one linguistics course can go ahead.'

C'   est tellement dommage, mais alors
That is such   pity   but then
'That is such a pity. But

plus de   cinq étudiants se   sont inscrits   à quel   cours ?
more than five students   REFL are registered at which course
for which course did more than five students register?'

Similarly, it is more difficult to envisage a context that makes a question with *ne … que* 'only' Maximally Given. Yet, according to judgments by native speakers, even a *wh*-in-situ question with the focus expression *ne … que* 'only' can be acceptable (43).[47] (The intended reading of (43) is that at the events at the end of the year, they did not speak to other people than Suzanne.)

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[47] It seems that something special is going on with *seulement* 'only'. According to the native speakers I consulted, a *wh*-in-situ question with this intervener is also better in a context that makes it Maximally Given, but it is still not acceptable.

(43) Pierre, Paul et Jean sont tous allés au lycée ensemble. À la fin de l'année, chacun d'eux n'a parlé qu'à Suzanne. Pierre l'a croisé pendant les examens, Paul lui a parlé lors de la remise des diplômes.

'Pierre, Paul and Jean all went to secondary school together. At the end of the school year, each of them only spoke to Suzanne. Pierre met her during the exam period, Paul spoke to her at the graduation ceremony.'

Et   Jean,
and Jean
'And Jean,

il   *n'* a   parlé   *qu'* à Suzanne dans quelles circonstances ?
he   NE   has spoken only   to Suzanne in   what   circumstances
in what circumstances did he only speak to Suzanne?'

In short, a *wh*-in-situ question with an intervener can be felicitous if one is able to envisage the right context, but this is harder for some interveners than for others. If the necessary context is not easily available, the sentence becomes unacceptable.[48]

6.2   Variation regarding the same intervener

Maximal Givenness also sheds light on the variation among sentences with the same intervener, as other aspects of the sentence meaning also affect how easily one can envisage the necessary context. Even if two sentences are identical and they are also presented in identical contexts,

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[48] Note that other factors may also influence the relevant judgements. Example (i), cf. (43), was judged more acceptable by my informants than (ii).
  (i) Jean *n'*a parlé *qu'*à Suzanne dans quelles circonstances ?
  (ii) Jean *n'*a parlé *qu'*à Suzanne où ?
     'In what circumstances/where did Jean only speak to Suzanne?'
This relates to the prosodic constraints or strategies that were discussed in Section 4.2 of Chapter 2, which seem to make the sentence with the longer *wh*-phrase more natural.

variation may arise in contexts that allow for more than one interpretation.

All sorts of subtle differences between sentences can affect how easy it is to construe the context that is needed. Compare the sentences in (44), in which only the predicates differ, but even the meanings of these predicates are closely related.

(44) a. Elle ne mange   *pas* quoi, ta   fille ?
     b. *Elle ne goûte   *pas* quoi, ta   fille ?
         she NE eats/tastes not   what your daughter
         'What doesn't your daughter eat/taste?'

[adapted from Engdahl 2006: 100, ex. 23]

I suggest that it is easier to construe a context that would make the sentence Maximally Given for (44a) than for (44b). To make (44a) Maximally Given, the context must make salient that there are one or more specific things that the interlocutor's daughter does not eat. The fact that this is so easy to imagine is also related to world knowledge. Most children have one or more things that they do not eat, not one or more things that they do not taste (in the sense of 'try'). Moreover, native speakers I consulted report that changing the tense in (44b) markedly improves the sentence, indicating that tense can make a difference (44c).

     c. Elle n' a   *pas* goûté quoi, ta   fille?
         she NE has not tasted what your daughter
         'What didn't your daughter taste?'

Even if sentences are presented in identical contexts, some variation may arise if the context allows for more than one interpretation. Take the context in (45), adapted from Engdahl's (2006) example in (12) above. I would call the necessary CSM in this example 'semi-salient'.

(45) *Semi-salient*

Anne has two children, a son and a daughter. They are both rather picky about what they eat. Anne mentions that her son doesn't eat fish. Her friend asks:

Et ta fille, elle ne mange *pas* quoi?
and your daughter she NE eats not what
'And your daughter, what doesn't she eat?'

[cf. Engdahl 2006: 100, ex. 23]

Does the remark that both children are *rather picky* establish that there is a specific thing that Anne's daughter does not eat (at all)? That seems to be open to interpretation. Possibly, by analogy with the son, the daughter also has a specific type of food that she does not eat. Yet, the daughter could also just be generally fussy about her food.

One can strengthen the context in (45) so that it leaves no more room for an alternative interpretation (46).

(46) *Salient*

Anne has three children, two sons and a daughter. She has a rule at home according to which each child is allowed to have one type of vegetable that they do not eat. Anne mentions that her oldest son doesn't eat cabbage and her youngest son doesn't eat sprouts. Her friend asks:

Et ta fille, elle ne mange *pas* quoi?
and your daughter she NE eats not what
'And your daughter, what doesn't she eat?'

In (46), I added a child, which strengthens the sense of analogy. Moreover, it is made explicit that each child has the relevant property of not eating a specific thing (mentioning the intervener). I also made the contextual restriction of the *wh*-phrase more specific: vegetables instead of food items in general. All these elements seem to help to make it very salient that there is a specific type of vegetable that Anne's daughter does not eat.

I have shown above that while a context may make the relevant meaning salient without question, a context may also do so depending on the interpretation of the speaker, predicting speaker variation. The interpretation of a speaker may even be different at different points in time, leading to variation in judgments by the same speaker. This variation is predicted when a context leaves some things unspecified, rendering it compatible with more than one situation (as imagined by the speaker). Recall also that a speaker's associations may influence what a context makes salient for him/her (see Chapter 3 for discussion). For example, my beliefs about and experiences with children may influence what the context in (44) makes salient for me. Finally, note that a speaker can always construe more (details of the) context herself; such additional context may then also differ among speakers. In other words, in addition to variation among interveners, Maximal Givenness also explains variation among sentences with the same intervener, even given an identical context. All these aspects of the sentence content affect how easy or difficult it is to construe the necessary context.

7   Echo questions

In Section 6, I laid out several types of data variation that Maximal Givenness can account for. I will now discuss another type of variation that is not usually seen as such, namely the contrast between echo and information seeking questions.

In the literature regarding intervention effects in French *wh*-in-situ questions, echo questions systematically receive different judgments than information seeking questions. Authors regularly mention that a particular sentence that displays intervention effects would be acceptable as an echo question (Baunaz 2005; Beyssade 2006; Chang 1997; Cheng & Rooryck 2000; Engdahl 2006). This also concerns sentences with relatively uncontroversial interveners. For instance, (most) authors who discuss the interveners *personne* 'nobody' (47) and *seulement* 'only' (48) agree that they cause intervention effects in information seeking questions (Baunaz 2011; Beyssade 2006; Chang 1997; Cheng & Rooryck 2000; Engdahl 2006;

Hamlaoui 2010; Mathieu 1999; 2002; Zubizarreta 2003). Still, the sentences in (47) and (48) are judged to be acceptable as echo questions.

(47) *_Personne_ n' admire   qui ?
     nobody   NE admires who
     Intended: 'Whom does nobody admire?'
     Acceptable as: 'Nobody admires who? (e.g. I didn't hear you.)'

[adapted from Beyssade 2006: 182, ft]

(48) *Il   lit   _seulement_ quoi ?
     he reads only   what
     Intended: 'What is the only thing that he reads?'
     Acceptable as: 'He only reads what? (e.g. I didn't hear you.)'

[Engdahl 2006: 104, ex. 35a]

At the same time, there is no publication (to my knowledge) that reports on an echo question displaying intervention effects.

I would like to suggest that echo questions do not display intervention effects because the context that licenses the use of an echo question is such that it is always Maximally Given. (As I will lay out in Chapter 6, there are differences as well as similarities between echo questions and Maximally Given information seeking questions.) Artstein (2002) describes the necessary relation between an echo question and the utterance that precedes it. According to him, the use of an echo question is only felicitous if the echo question is in its entirety given. This is the case when the content of the previous utterance entails the content of the echo question. Artstein also mentions that assumptions on the part of the speaker may play a role in the entailment. This is practically identical to the definition of Maximal Givenness in (31).[49]

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[49] There is a difference between my definition of Maximal Givenness in (31) and the way in which Artstein describes givenness of an echo question. In particular, they differ in how they deal with the entailment of a meaning that is not a proposition but a _wh_-in-situ (echo) question. I proposed in (31) that a _wh_-in-situ question is Maximally Given if a CSM entails _the answer_ to the question. Artstein (2002: 102) mentions that the context must

I illustrate that an echo question is felicitous in a context that makes the sentence Maximally Given, using a French echo question containing an intervener. If (47) above is an echo question of the type expressing auditory failure, the preceding utterance would be something like in (49).

(49) A: Personne   n'   admire   #####[noise].
       nobody   NE   admires
       'Nobody admires #####[noise].'

   B: *Personne*   n'   admire   qui ?
       nobody   NE   admires who
       'Nobody admires who?'

Recall from the definition of Maximal Givenness in (31) that a *wh*-in-situ question is Maximally Given if a Contextually Salient Meaning (CSM) entails the answer to the question. In (49), it is salient for speaker B that speaker A said that a specific person is admired by nobody. Speaker A's utterance mentions such a person, but because of the noise, speaker B did not hear who the person was. The echo question therefore asks for specification of the referent mentioned by speaker A. Consequently, speaker A's utterance as perceived by speaker B entails the answer to the echo question, as is displayed in (50).

(50) context: You said that nobody admires [a specific person]$_i$

          entails

   answer: You said that nobody admires [Jean-Jacques]$_i$ or
         You said that nobody admires [my neighbour]$_i$ etc.

Consequently, the echo question in (49) can be paraphrased as in (51).

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entail "the proposition derived by treating the *wh*-phrase as an indefinite with its normal content (e.g. *who* must refer to a person) but without *wh* properties".

(51) The person of whom you said that nobody admires him/her
    – who is it?

Hence, echo questions are always Maximally Given. I suggest that this is why they never display intervention effects.

Following the argumentation above, the context in which an echo question is uttered always licenses the use of a choice function. In turn, this predicts that echo questions involve a singleton-set of propositions. I return to this topic in Chapter 6.

8   Conclusions

I investigated in this chapter the influence of context on intervention effects. The research builds on work by Starke (2001) and Baunaz (2005; 2011; 2016), who note that intervention effects are voided in a particular type of context. I suggested that the effect of context also plays a role in judgments of sentences in isolation, as speakers are then free to envisage their own contexts, which may result in variation of judgments.

First, I investigated what characterizes a context that voids intervention effects. I proposed the 'Intervention effects avoidance generalisation', which states that a context that voids intervention effects makes the entire *wh*-in-situ question 'given' according to the framework of Büring (2016). I called this 'Maximally Given'. A *wh*-in-situ question is Maximally Given if a Contextually Salient Meaning (CSM) entails the answer to the question. For this to be the case, the context must establish the existence of a specific referent for the *wh*-phrase, i.e. with the property as mentioned in the question, crucially including the intervener. Of relevance is not only the context itself, but the speaker's perception of the context. When a *wh*-in-situ question is Maximally Given, it can be paraphrased using a definite description corresponding to a contextually given referent as in the examples above.

The chapter then considered why Maximal Givenness voids intervention effects. I proposed that when a *wh*-in-situ question is Maximally Given, a choice function is available. I assumed a contextually supplied choice function, cf. Kratzer (1998) for specific indefinites.

Following Kratzer, the choice function variable is free and the context determines its value. I suggested that the choice function is only available when the question is Maximally Given because Maximal Givenness makes the choice function recoverable for the interlocutor. As the choice function provides an alternative for covert *wh*-movement, the intervention effects configuration does not arise. The choice function also explains the non-standard interpretation of a Maximally Given *wh*-in-situ question. I assumed that (covert) *wh*-movement creates alternatives (cf. Karttunen 1977) and that a *wh*-question contains a question operator that turns a proposition into a set of propositions. Under these assumptions, a sentence with a question operator but without movement denotes a singleton-set of propositions, which is in line with the observed interpretation.

Finally, I examined what data variation the proposal can account for. I demonstrated that, like the previous proposal by Baunaz (2011; 2016), it can explain variation among different interveners. Yet, it explains the data without the need to assume the existence of three different classes of interveners or to stipulate the presence of features on them. In addition, the proposal accounts for variation among sentences with the same intervener, including identical sentences. In other words, it explains more of the observed variation. It also accounts for the absence of intervention effects in echo questions. In conclusion, the chapter shows that intervention effects in French *wh*-in-situ questions can be voided, as long as a context is construed that makes the question Maximally Given.