Variation in wh-expressions asking for a reason

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In this paper, I will discuss some types of variation in wh-expressions asking for reasons such as *why*, *what...for* and *how come* with special attention to their base-generated positions in the framework of the cartography of syntactic structures. I will first discuss *why* and *what...for* to illustrate variation in the base-generated position of wh-expressions asking for reasons. I will next explore a new dimension in the cartography of syntactic structures by discussing some variation in the use of *how come* and the complementizer *that* among speakers.

Keywords: Criterial Freezing, CP, ReasonP, why, how, come, what for

1. Introduction

In this paper, I will discuss some types of variation in wh-expressions asking for reasons such as *why*, *what...for* and *how come* with special attention to their base-generated positions in the framework of the cartography of syntactic structures, a project aimed at devising as detailed as possible a map of syntactic configurations. I will first discuss *why* and *what...for* to illustrate variation in the base-generated position of wh-expressions asking for reasons. I will next explore a new dimension in the cartography of syntactic structures by discussing the base-generated positions of *how come* and some variation in the use of *how come* and the complementizer *that* among speakers.

This paper is organized as follows. I will first introduce Rizzi's (2001, 2004) classic idea that *why* is base generated in the CP zone and Shlonsky and Soare's (2011) recent proposal that *why* is base generated in ReasonP within CP. I will next examine another wh-expression *what...for* to illustrate variation in the base-generated position of wh-expressions asking for reasons. I will finally explore a new dimension of the cartography of syntactic structures by discussing the base-

generated positions of *how come* and some variation in the use of *how come* among speakers.

2. Rizzi (2001, 2004) and Shlonsky and Soare (2011)

Based on the idea that the CP zone is characterized by scope/discourse properties (cf. Chomsky 2001), Rizzi (1997, 2001, 2004) claims that there are various functional heads in the CP zone for topic, focus, and so forth, as shown in (1), and that scope/discourse interpretations are determined by a family of principles, the Criteria, which require a scope- or discourse-related element to enter into a Spechead or head-head agreement relation with respect to features of the relevant class: e.g. TOP, FOC, MOD and so forth for topic, focus, and fronted adverbial elements respectively.

(1) Force TOP* Int TOP* Focus MOD* TOP* Fin IP (Rizzi 2004)

A head endowed with the relevant feature requires a phrase bearing that feature, and thus designates a position dedicated to the relevant type of interpretation. According to Rizzi (2006), the creation of a criterial configuration freezes the structure by Criterial Freezing:

(2) Criterial Freezing: A phrase meeting a criterion is frozen in place.

Thus, in (3a), once a wh-element is moved into the clause initial position to enter into a Spec-head configuration with C_Q (= C_{FOC} in (1)), it is frozen there and may not move further, as shown by the ungrammaticality of (3b):

(3) a. Bill wonders [which book C_Q [she read t]] b. *Which book C_Q does Bill wonder [t' C_Q [she read t]]?

With this background in mind, let us examine the following asymmetry between *why* and other adjuncts like *how* with respect to their base-generated positions and negative islands (the relevant example being taken from Shlonsky and Soare 2011):

(4) a. Why didn't Geraldine fix her bike?b. *How didn't Geraldine fix her bike?

This asymmetry stems from the fact that *why* is base-generated in the CP zone. Unlike *how*, which is displaced from a position lower than negation (NEG), Rizzi (2001, 2004) proposes that *why* is base generated in Spec, InterrogativeP (henceforth, Spec, Int) in a position higher than NEG, and thus does not cross negative islands. Rizzi also discusses some movement properties of *why*. For instance, *why* is ambiguous in (5), allowing both matrix and embedded interpretations. That is, *why* can be interpreted as questioning the reason for your saying something, where *why* is associated with the verb *say* in the matrix clause (matrix construal); alternatively, it can be construed with the lower clause questioning the reason for Geraldine's leaving, where *why* is associated with the verb *left* in the embedded clause (embedded construal). He claims that *why* may raise from its "base" position in the embedded Spec, Int and move to the same position that hosts other moved *wh*-expressions (embedded construal), or it may be base generated in the matrix CP (matrix construal).

(5) Why did you say Geraldine fixed her bike?

Shlonsky and Soare (2011) argue against base-generation of of *why* in Spec, Int from the viewpoint of Criterial Freezing. In the embedded construal in (5), if *why* is base generated in Spec, Int, a criterial position, it should not be able to move into the matrix clause, because it would be frozen in place in Spec, Int in the embedded clause by Criterial Freezing. To solve this problem, Shlonsky and Soare postulate the presence of a ReasonP in the CP zone, where *why* is base generated. Because ReasonP is not a criterial position, *why*, which is base generated in Spec, ReasonP in the embedded clause in (5), can move into the matrix clause in the embedded construal. As for the negative island effect in (4b), Shlonsky and Soare follow Rizzi's idea that *how* is base generated below NEG, and thus movement from this position into the CP zone induces a negative island violation.

To summarize, Shlonsky and Soare postulate the following hierarchical structure of the base-generated positions for *why* and *how*.

(6) Int > ReasonP (= why) > NEG > $how \dots$

3. Two reason projections

In this section, I will discuss one type of variation in the base-generated positions of wh-expressions asking for a reason by comparing *why*-clauses and split *what* ... *for* clauses. Consider, for instance, the following sentence with the pair consisting of *what* and *for*, which asks for the reason for your coming to the United States:

(7) What are you coming to the United States for?

As pointed out by Peter Svenonius (personal communication), this type of split *what-for* sentence is sensitive to negative islands:

(8)*What aren't you coming to the United States for?¹

This observation suggests that *what* and *for* are base generated in a position lower than NEG, and that *what* jumps over NEG, violating the negative island constraint. In the framework of Shlonsky and Soare, there would be another ReasonP below NEG from which the *what* of *what for* raises to the target IntP: ReasonP1 (*why*) > NEG > ReasonP2 (*for what*).²

As Byron Ahn (personal communication) points out, the idea that *what* in *what for* questions is base-generated in a position lower than NEG gains support from sentences like (9), where the reason expression headed by *for* is always inside the scope of NEG, as opposed to the reason expression headed by *because (of)*, which is ambiguous between two readings, one inside and one outside the scope of NEG:³

- (9) a. John didn't do it for food. (not > for food, *for food > not)
 - b. John didn't do it because of food. (not > because of food > not)

At this point, one may wonder if ReasonP2 can be dispensed with by assuming that the meaning of asking for a reason comes from the preposition *for*. This idea is argued against by the cross-linguistic facts in (10), where a preposition or a postposition corresponding to *for* is absent. That is, some languages can express a meaning similar to the split form *what* ... *for* in English, but with the preposition *for* missing. This type of question shows sensitivity to negative islands, which again suggests that there is a ReasonP below NEG in which wh-elements asking for reasons are base generated. (Hereafter, I will use WHAT to denote the type of

 (i) Immigration Officer: What are you coming to the US for? Immigrant: What aren't I coming to the US for?!!! (implication: EVERYTHING in the US attracts me to it)

^{1.} Andrew Radford (personal communication) points out the following potential counterexample (italicised):

The italicised clause appears to be exclamative in function. Note, however, that exclamatives do not allow Subject-Auxiliary Inversion (SAI). Andrew Radford (personal communication) claims that (i) is like 'Why don't you close the window?' – i.e. syntactically interrogative, but pragmatically a requestive or suggestive. So (i) is interrogative in form, but pragmatically can be construed as exclamative in force.

^{2.} Collins (1991: 32) claims that reason adverbials can originate as IP or VP adjuncts. Following Cinque (1999) and Rizzi (2004), I will assume a phrase structure without phrasal adjunction. If we translate Collins' claim into our framework, it means positing a low ReasonP above vP.

^{3.} Andrew Radford (personal communication) points out that in a sentence like (i) below the PP *for love of his country* can be interpreted outside the scope of negation. More study is needed in this area.

⁽i) John didn't do it for love of his country.

what asking for a reason.) Obenauer (2006) calls such question forms surprisedisapproval questions (SDQ).⁴

(10)	a.	Cosa (*non) ridi?	(Italian)
		what (*not) laugh	
		'What are(*n't) you laughing?'	
	b.	Nani-o warat-tei (*nai) no?	(Japanese)
		'What are(*n't) you laughing?'	

What is the semantic interpretation responsible for the ReasonP located below NEG in which *what* of *what for* questions are base generated? The *what for* questions only have the interpretation of 'rationale *why*', as opposed to the interpretation of 'cause *why*':

(11)	What is grass green for?	
	a. So that caterpillars can play on it.	(Rationale)
	b. *Because God created it that way.	(Cause)

Compare this *what for* question with *why*, which can have both readings. (See Endo (2014) on this point). Based on this fact, I suggest that the semantic interpretation responsible for the ReasonP located below NEG is rationale, as opposed to cause.⁵

A LIV reviewer asks what is the landing site of *what* of the *what for* questions and whether or not it is different from the landing site of *why*. Because the main concern of this paper is to explore the variation of the base-generated positions of wh-expression asking for reason, I will not go into this topic in this paper. However, let me touch on this point briefly to highlight the difference between *why* and *what for*. Because the landing site of *what* is found in the CP zone, which is characterized by scope/discourse properties, I suggest the nature of the landing site of *what* and *why* can be found in their discourse properties. This point is discussed by Ochi (2004), who notes the discourse properties of WHAT-questions asking for reasons. Based on mainly German sentences, Ochi claims that WHATquestions are most appropriate in a context in which the speaker is emotionally affected (i.e., puzzled, annoyed, etc.). For instance, a sentence like (12) is best uttered in a situation in which the speaker is annoyed, upset, or surprised by

^{4.} As Obenauer notes, the SDQ interpretation is optional in English. I am grateful to Cecilia Poletto (personal communication) for reminding me of Obenauer's work. See Endo (2014) on this point.

^{5.} As a LIV reviewer points out, some speakers can also have a purpose interpretation in (11). More study is required on this variation among speakers.

someone sitting here (for example, he/she is sitting and resting, when he/she is supposed to be studying somewhere else).

(12) What are you sitting here for?

This discourse property is absent in *why* questions. Based on this asymmetry between *why* and *what for* questions, I suggest that the criterial positions of *what* and *why* are different. At this point, there are not sufficient elements to determine the exact position of *what of what for* inside the split CP.

To summarize so far, we have looked at syntactic variation in the basegenerated positions occupied by a wh-element asking for reason: why > NEG >what for.

4. How come

In this section, I will examine the base-generated position of *how come* and some related issues. I will first note a problem revolving around the base-generated position of *how come* and the complementizer *that*. I will next show variation in the use of *how come* and the complementizer *that* among speakers, where the variation is handled by using Rizzi's (2014) idea of Fin recursion.

4.1 Background

Zwicky and Zwicky (1973) note that *how come* may only be construed with the matrix clause, as in (13).

(13) How come you say that John is mad? (ok matrix, *embedded)

Collins (1991) claims that *how come* is base generated in the C head of the matrix clause, and thus may not appear in the embedded clause and undergo long-distance movement into the matrix clause, because head movement is generally clause-bound.

Shlonsky and Soare (2011) point out a potential problem with Collins' analysis by observing that *how come* patterns with a phrasal element like *why*, not with a head element like *if* and *whether*, which do not participate in Sluicing.

(14) They thought John left early, but they didn't tell me why/how come/*whether/*if $\phi.$

On the basis of this observation, Shlonsky and Soare suggest that *how come* is base generated in the specifier position of XP. To be more specific, they adopt Rizzi's (2001) idea that Italian *come mai* 'how come' is base generated in Spec. Int in the

CP system in (1), and they also base generate *how come* in Spec, Int. I will adopt this idea in my analysis of the variation in *how come* questions.

(15) ForceP IntP (=how come) TOPP FOCP MOD WhP Fin(ite)P

Since Rizzi (1997), it has been standardly assumed that the complementizer *that* occupies the head position of ForceP. As we see in (15), ForceP is found in a position higher than IntP, and we wrongly expect the complementizer *that* does not follow *how come*, which is found in Spec, Int.⁶

More recently, Rizzi (2014) explored the possibility that the complementizer *that* may also be found in the head position of FinP. (See the following sections for the motivation of this idea.) Given this new idea, *how come* is correctly expected to be followed by the complementizer *that*, because IntP, where *how come* is base-generated, is located in a position higher than Fin, where the complementizer *that* may appear in the head position.

4.2 Variations of *how come* questions

Zwicky and Zwicky (1973) state that many speakers allow *how come* to be followed by the complementizer *that*. However, the informal questionnaire survey I conducted with Andrew Radford shows that many English speakers do not accept *how come* immediately followed by *that*. With this background in mind, I would

 (ii) Nante hayaku taberu koto! how quickly eat fact 'How quickly you eat!'

(iii) The strange things that he says!

^{6.} Based on Collins' (1991: 43) idea that *how come* presupposes the truth of its complement (cf. Fitzpatrick (2005) and Conroy (2006)), Radford (2015) suggests that *that* is a factivity head projecting into a FactP in *how come that* questions, where FactP is located between Force and FoC in the CP system in (13). See also Radford (2013, 2018).

Radford (2015) also discusses the factive nature of English exclamatory clauses. He reports that exclamatory clauses can contain *that* not only in embedded clauses but also in root clauses for some speakers as in (i) below, where *that* appears in the head position of FactP:

⁽i) How quickly that people forget!

Note that the corresponding exclamatory clauses in Japanese are formed by combining the factive morpheme *koto* 'fact', which has been taken as a nominalizer (Teramura 1992):

A similar exclamatory sentence to that in (iii) below is discussed by Portner and Zanuttini (2005:57), where a nominal expression formed out of a relative clause is interpreted as an exclamatory clause and is also factive in not functioning as an answer to a question – See Honda (2015) for discussion on this type of exclamatory sentence:

like to explore the variation of *how come* and the complementizer *that* among speakers.

To be more precise about the survey, Andrew Radford and I devised an informal questionnaire in which native speakers of English were asked to judge the acceptability of the following 7 sentences:

- (16) i. How come I fell in love with someone like you?
 - ii. How come that I fell in love with someone like you?
 - iii. How come I fell in love with someone like you, and that you fell in love with someone like me?
 - iv. How come did I fall in love with someone like you?
 - v. How come I ever fell in love with someone like you?
 - vi. How come that I ever fell in love with someone like you?
 - vii. How come did I ever fall in love with someone like you?

The results are presented in tabular form in (17) below, where the letters (A–S) denote different informants, the Roman numerals (i–vii) denote the correspondingly numbered sentences above, and the Arabic numerals (1–5) denote scores. The informants were university teachers of English or Linguistics: A–K were from the UK, L-Q from the USA, R from Canada, S from Australia, and T from New Zealand. They were asked to rate the sentences on a 5-point scale (5=OK, 4=?, 3=??, 2=?*, 1=*).

	۱
(17))

Table 1

	A	B	С	D	E	F	G	н	I	J	к	L	М	N	0	Р	Q	R	s	Т	Mean
(i)	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5	5	4	4.9
(ii)	1	1	2	3	3	2	2	2	2	1	5	1	2	3	1	2	3	1	1	1	2.0
(iii)	1	2	5	4	3	2	4	3	5	3	5	1	5	5	5	3	5	2	1	3	3.4
(iv)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	2	1	1	1.3
(v)	5	5	3	5	4	5	5	4	4	5	5	5	5	4	2	5	5	2	2	1	4.1
(vi)	1	1	2	3	1	2	2	1	2	1	5	1	2	1	1	2	4	1	1	1	1.8
(vii)	1	1	1	1	1	3	1	1	3	1	1	1	1	1	1	3	5	3	1	1	1.6

For our present purposes, what is relevant is the pattern in (i–iii), where the adjacency of *how come* and the complementizer *that* is at issue. In (i), all speakers gave very high scores (mean = 4.9) for *how come*+*Subject* questions, while in (ii) only one speaker gave a score above 3 to *how come*+*Complementizer* structures (mean = 2.0). In addition, when *how come* is not adjacent to the complementizer *that*, all the speakers gave a higher score (mean = 3.4).

In addition to this joint survey, among the linguists that I consulted, I found many speakers allow *how come* to be followed by the complementizer *that* in the presence of an intervening adverbial element, as in (18). That is, many speakers who do not accept *how come* immediately followed by *that* as in (18a) find the use of *that* more acceptable in (18b), where an underlined adjunct phrase intervenes between *how come* and *that*:

- (18) a. *How come that I fell in love with someone like you?
 - b. How come, after a long drawn-out conflict, that the Israelis and Palestinians still haven't made peace? (Radford 2015)

There are three patterns involving *how come* and the complementizer *that* among speakers, as shown below. Here, the letters N, V, etc. denote different linguists that I consulted.

- Pattern 1: N and V report that *how come* can be followed by the complementizer *that* in the presence of an intervening adverbial element, which is shared by many speakers.
- Pattern 2: K and L point out that they do not accept *how come* followed by *that* even in the presence of an intervening adverbial element.
- Pattern 3: R and S note that *how come* may be followed by *that* even in the absence of an intervening adverbial element.

K and L (Pattern 2) are US informants while R and S (Pattern 3) are UK informants. In view of this fact, one may wonder if this variation is dialectal in nature. It turns out that the distinction between Pattern 2 and Pattern 3 is not a US vs. UK distinction, because US informants like Arnold Zwicky and Anna Zwicky belong to Pattern 3. In addition, American English (and also British English) has internal dialectal variation, which explains the observed patterns.

4.3 Capturing the variations of how come questions

Bearing in mind the pattern of *how come* questions and the complementizer *that* we saw above, let us examine the inter-speaker variation revolving around *how come* and the complementizer *that*. Where does the variation come from? Since the inception of the Principles and Parameters approach, variation in syntax has been restricted to the properties and features of functional categories (cf. Borer 1984). Along this line, I would like to explore the possibility that the variations of judgment of *how come* questions and the complementizer *that* among speakers also stems from properties of functional elements, i.e. Fin. To be more specific, I will try to capture the variation of *how come* and the complementizer *that* by

using Rizzi's (2014) recent view on Fin recursion. So, let me first introduce his idea below.

Based on a sentence like (19), Rizzi discusses *that*-trace sentences from Culicover (1993) where the *that*-trace effect is alleviated in the presence of an intervening adverbial element.

(19) This is the man who I think that, next year, ____ will sell his house

Rizzi attributes this alleviation effect to the fact that a recursion of Fin is possible in the presence of an adverbial element (=MOD), as represented in (19') below, where the lower Fin is [+N] to license the subject position and the higher Fin is Fin[that] that hosts *that*.

(19') [[that] [[next year] [[φ] [[$_{D}$ \emptyset]...who...]]]] FINP FIN[-N] MODP MOD FINP FIN[+N] DP SUBJ

In the absence of an intervening element, Fin recursion is impossible, because it has the illicit double Fin configuration...*Fin-Fin, where the following principle advanced by Rizzi (2014) is violated:

(20) A head cannot select a categorially non-distinct head.

That is, simple recursion of Fin creates an illicit representation because the higher Fin selects a categorically non-distinct Fin head in violation of (20). Thus, an intervening element is required between two Fins.

To summarize, Rizzi's Fin recursion system consists of the properties in (21):

- (21) a. In the presence of an adverbial element, Fin recursion creates a split form of Fin (=Fin[that] and Fin[+N]);
 - b. Fin[that] may host *that*;
 - c. Fin[+N] does not host *that*.

I suggest that Fin[that] differs from Fin[+N] in that it does not carry the feature [+N]. With these properties of Fin in mind, let us examine the variation in judgments among speakers on *how come* questions.

4.3.1 *How come that* = **in the absence of an intervening adjunct (many speakers)*

The first question that I would like to ask is why many speakers (Pattern 1 and Pattern 2) do not accept *how come* immediately followed by the complementizer *that* in the absence of an adverbial element. Based on the fact that this type of speakers does not accept *how come* immediately followed by the complementizer *that*, I follow Andrew Radford's (personal communication) suggestion that *how come* selects Fin[+N]. As we saw in (21), Fin[+N] does not spell out the overt complementizer *that*, and thus *how come* is not followed by the complementizer *that*. $(22)^*$ how come Fin[+N]...

In order for the complementizer *that* to appear, Fin[that] must be merged, as in (23). But, this representation is illicit because it violates the principle in (20), which is repeated as (24) below. For this reason, many speakers do not accept *how come* to be immediately followed by the complementizer *that*.

(23)*how come Fin[+V] Fin[that] that

(24) A head cannot select a categorially non-distinct head.

Although the fact that *how come* questions do not involve Subject-Auxiliary Inversion (SAI) for many speakers is not our main concern, let me touch on this point briefly here because it has to do with our suggestion that *how come* selects Fin[+N]. Recall the results of our survey in (17), where only one speaker gave the score 5 to *how come* + SAI structures (mean = 1.3). Rizzi and Shlonsky (2006: 349) and Haegeman (2012: 145) suggest that SAI sentences involve a derivation where Fin is endowed with a verbal feature to attract an auxiliary verb to the head position of Fin. Given this idea, the fact that most speakers do not allow *how come* to have a SAI structure is given the following account. *How come* selects Fin[+N], which, not being verbal in nature, does not have the ability to attract an auxiliary verb. For those speakers who allow for SAI in *how come* question, I suggest that such speakers may have Fin endowed with a verbal feature.⁷

To summarize, *how come* may not be followed by the complementizer *that* for many speakers because it violates the principle in (20).

4.3.2 How come MOD that = OK (many speakers)

The next question I ask is why many speakers (Pattern 1) allow *how come* to be followed by the complementizer *that* in the presence of an intervening adverbial element. Recall here the illicit representation in (23). This representation can be rescued by the presence of an intervening adverbial element to avoid the violation of the principle in (20), as in (25):

(25) *how come* Fin[+N] [adverbial element] Fin[that] *that*...

Here, the representation does not violate the principle in (20) because the higher Fin[+N] does not select Fin[that] with an intervening adverbial element.

^{7.} As a LIV reviewer points out, informant K allows SAI, but is very restrictive when it comes to *how come + that* in that s/he is a Pattern 2-speaker. More study is required in this area.

At this point, one may wonder if Fin[that] and Fin[+N] switched around to have the representation in (26). This representation is illicit because it runs counter to our suggestion that *how come* selects Fin[+N].⁸

(26) how come Fin[that] that [adverbial element] Fin[+N]...

To summarize, many speakers allow *how come* to be followed by the complementizer *that* in the presence of an intervening adverbial element because the intervening adverbial element creates a licit representation without violating the principle in (20): *that*-adv-*that*.

4.3.3 How come that=OK even in the absence of an intervening adjunct (some speakers)

Let us turn to a variation among speakers of Pattern 3. As we saw earlier, speakers like R and S allow *how come* to be immediately followed by the complementizer *that*. Following the suggestion by Andrew Radford (personal communication), I suggest that for such speakers Fin[+N] may be spelled out as the complementizer *that*.

(27) how come Fin[+N] that

Here, the Fin[+N] hosts the complementizer *that*. This representation is illicit for many speakers because Fin[+N] does not spell out the complementizer *that*. Here, one may argue that the idea that Fin[+N] may spell out the complementizer *that* is not motivated. Recall here the representation of the *that*-trace sentences in (19'), which is repeated below as (28) for convenience.

(28) $\left[\sum_{\text{FINP}} \left[\sum_{\text{FIN}[-N]} \text{that} \right] \left[\sum_{\text{MODP}} \left[\sum_{\text{MOD}} \text{next year} \right] \left[\sum_{\text{FINP}} \left[\sum_{\text{FIN}[+N]} \phi \right] \left[\sum_{\text{DP}} \left[\sum_{\text{D-SUBJ}} \phi \right] \right] \right]$... who

Here, Fin[+N], which does not spell out the complementizer *that*, licenses the subject position. Most speakers require a nominal Fin to have a null spellout, but a few allow Fin[+N] to be spelled out as *that*. Speakers who can spell out a nominal Fin as *that* allow *that*-trace violations, if a nominal Fin (which can be spelled out as *that* by a minority of speakers) licenses subject extraction. Andrew Radford (personal communication) reports that he allows that-trace violations, e.g. in *Who do you think that is most likely to win the race?* And he also allows *how come* to be immediately followed by the complementizer *that*. Thus, the idea of the inter-speaker variation to spell out Fin[+N] as *that* seems to be motivated.

^{8.} As a LIV reviewer points out, this representation also runs counter to Rizzi's analysis, whereby Fin[that] is the higher head, and Fin[+N] the lower one in cases of Fin-recursion.

4.3.4 *How come that=* even in the presence of an intervening adjunct (some speakers)*

Let us turn to another type of variation, where speakers like K and L do not allow *how come* to be followed by the complementizer *that* even in the presence of an intervening adverbial element, as in (29).

(29)* *how come* [adverbial element] *that...*

I suggest that such speakers do not have the feature [that] for Fin to host the complementizer *that*; instead, the complementizer *that* is exclusively hosted by ForceP, as in (30):

(30)* *how come* Fin[that] that

This representation is illicit for speakers like K and L because the complementizer *that* is hosted by Fin, not by Force.

At this point, one may wonder how the *that*-trace sentences in (19) would be represented for speakers like K and L. I suggest that for such speakers, *that*-trace sentences have the representation in (31), where Fin is not Fin[+V] but is a feature neutral Fin form and the complementizer *that* appears in the head position of Force:

(31) $\left[_{\text{FORCEP}} \left[_{\text{FORCE}} that \right] \left[_{\text{MODP}} \left[_{\text{MOD}} \text{next year} \right] \left[_{\text{FINP}} \left[_{\text{FIN}[+N]} \phi \right] \left[_{\text{DP}} \left[_{\text{D-SUBJ}} \emptyset \right] \right] \dots \text{ who} \dots \right] \right] \right]$

To summarize, by using Rizzi's Fin recursion system, I have tried to capture inter-speaker variation in the judgment of *how come* questions, with special attention to the complementizer *that*. My suggestion is that the diversity of judgments revolving around *how come* questions stems from variation in the properties of the functional head Fin: (i) whether or not the complementizer *that* is hosted in the head position of Fin or Force, (ii) whether or not Fin[+V] *that* is available without recursion in the absence of an intervening adjunct:

- (32) a. * *how come* [Fin[+N] *that* (for many speakers)
 - a. *how come* [Fin[+N] *that* (for some speakers)
 - b. *how come* [Fin[+N] adjunct [Fin[that] *that...* (for many speakers.)
 - b'. * how come [Fin[+N] adjunct [Fin[that] that... (for some speakers.)9

^{9.} Andrew Radford (personal communication) points out the following ordering restriction between *how come* and a topic element:

⁽i) a. I wish I knew [how come major issues like that, politicians are reluctant to tackle]

b. *I wish I knew [*major issues like that*, how come politicians are reluctant to tackle] This fits into the format in (18):

⁽ii) ForceP IntP (=how come) TOPP (=major issues like that) FOCP MOD WhP FinP

5. Coda

There is still more variation concerning the syntactic position of *how come*. Ochi (2004: 34, fn.7) observes that some speakers do not accept *how come* in embedded questions. I suggest that such speakers base generate *how come* in the specifier position of what Haegeman and Hill (2014) call Speech-ActP, which is found above ForceP. As Heizo Nakajima and Andrew Radford (personal communication) point out, speech acts describe properties of *utterances* not of clauses, and hence only sentences, i.e. root clauses, can be associated with speech acts, not subordinate clauses. Thus, such speakers base generate *how come* in Spec, Speech-ActP.

Acknowledgements

I would like to thank N, K, L, R, S, V and the informants who participated in the questionnaire study referred to in the paper. I would also like to thank Guglielmo Cinque, Richard Kayne, Richard Larson, Heizo Nakajima, Rachael Nye, Hidekazu Tanaka, Ur Shlonsky, Luigi Rizzi and Reiko Vermeulen for numerous helpful suggestions relating to form and contents of the paper. Special thanks go to Andrew Radford for fruitful and invaluable comments, tireless discussions and stylistic suggestions about the paper. This research is funded by a Grant-in-Aid for Scientific Research (C) of the Japan Society for the Promotion of Science (Project 16K02639).

References

- Borer, Hagit. 1984. *Parametric syntax: Case studies in Semitic and Romance languages*. Doredrech: Foris. https://doi.org/10.1515/9783110808506
- Chomsky, Noam. 2001. Derivation by phase. In Michael Kenstowicz (ed.), *Ken Hale: A life in language*, 1–52. Cambridge, MA.: MIT Press.
- Cinque, Guglielmo. 1999. *Adverbs and functional heads. Oxford* and New York: *Oxford* University Press.

Collins, Chris. 1991. Why and how come. MIT Working Papers in Linguistics 15. 31-45.

Conroy, Anastasia. 2006. The semantics of *how come*. University of Maryland Working Papers in Linguistics 14. 1–24.

Radford (2015) points out that those speakers who allow *how come* to be immediately followed by *that* also allow the sequence *how come that* to be followed by a modifier (MOD) or a focus (FOC) element:

⁽iii) How come that in 2012 not many people seemed too worried about the pending apocalypse?

I have no idea about the ordering restriction here. More study is required in this area.

- Culicover, Peter W. 1993. Evidence against ECP accounts of the that-t effect. *Linguistic Inquiry* 24. 557–561.
- Endo, Yoshio. 2014. Two ReasonPs: What are('nt) you coming to the United States For? In Ur Shlonsky (ed.), *Beyond functional sequence*, 220–231. New York: Oxford University Press.
- Fitzpatric, Justin. 2005. The whys and how comes of presupposition and NPI licensing in questions. *West Coast Conference on Formal Linguistics* 24. 138–145.
- Haegeman, Liliane. 2012. Adverbial clauses, main clause phenomena, and composition of the left periphery. Oxford: Oxford University Press.

https://doi.org/10.1093/acprof:0s0/9780199858774.001.0001

- Haegeman, Liliane, and Virginia Hill. 2014. Vocatives and speech act projections: A Case study in West Flemish. In Anna Cardinaletti, Guglielmo Cinque, and Yoshio Endo (eds.), *On Peripheries*, 209–236. Tokyo: Hituzi.
- Honda, Masatoshi. 2015. A compositional approach to the exclamatory use to the particle *koto* . *Tsukuba English Studies* 34. 125–142.
- Obenauer, Hans-Georg. 2006. Special interrogatives. In Jenny Doetjes and Paz Gonzalez (eds.) *Romance language and linguistic theory 2004*, 247–73. https://doi.org/10.1075/cilt.278.120be

Ochi, Masao. 2004. How come and other adjunct. Language and Linguistics 5. 29-57.

- Portner, Paul & Raffaella Zanuttini. 2005. Nominal exclamatives English. In Robert Stainton and Ray Elugardo (eds.). *Ellipsis and non-sentential speech*, 57–67. Dordrecht: Kluwer. https://doi.org/10.1007/1-4020-2301-4_3
- Radford, Andrew. 2013. The complementiser system in spoken English. In Victoria Camacho-Taboada et al. (eds.), *Information structure and agreement*, 11–54. Amsterdam: John Benjamins. https://doi.org/10.1075/la.197.01rad
- Radford, Andrew. 2015. How come questions with *how come* are different? Ms. University of Essex.
- Radford, Andrew. 2018. *Colloquial English*. Cambridge: Cambridge University Press. https://doi.org/10.1017/9781108552202
- Rizzi, Luigi. 1997. The fine structure of the left periphery. In Liliane Haegeman (ed.) *Elements* of *Grammar* 289–330. Dordrecht: Kluwer. https://doi.org/10.1007/978-94-011-5420-8_7
- Rizzi, Luigi. 2001. On the position of 'Iint(errogative)' in the left periphery of the clause. In Guglielmo Cinque and Giampaolo Salvi (eds.) *Current studies in Italian syntax*, 267–96. Amsterdam: Elsevier.
- Rizzi, Luigi. 2004. Locality and left periphery. In Adriana Belletti (ed.) *Structures and beyond*, 104–131. New York: Oxford University Press.
- Rizzi, Luigi. 2006. On the form of chains. In Lisa Cheng and Norvert Corver (eds.), *Wh*movement: Moving on, 97–133. Cambridge, MA.: MIT Press.
- Rizzi, Luigi. 2014. Some consequences of Criterial Freezing: Asymmetries, anti-adjacency and extraction from cleft sentences. In Peter Svenonius, (ed.), *Functional structure from top to toe The Cartography of Syntactic Structures*, Vol. 9, 19–54. New York: Oxford University Press. https://doi.org/10.1093/acprof:0s0/9780199740390.003.0002
- Rizzi, Luigi & Ur Shlonsky. 2006. Strategies of subject extraction. in H.-M. Gärtner and U. Sauerland (eds), Interfaces + Recursion = Language? Berlin: Mouton, 115–60.
- Shlonsky, Ur & Gabriela Soare. 2011. Where's 'Why'? *Linguistic Inquiry 42*. 651–69. https://doi.org/10.1162/LING_a_00064
- Teramura, Hideo. 1992. *Nihongo-no sntax to imi* vol. 3 [The syntax and semantics in Japanese vol.3]. Tokyo: Kurosio.

Zwicky, Arnold & Ann Zwicky. 1973. How come and what for. *Ohio State University Working Papers in Linguistics* 8. 173–185.

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