

4 On the Distribution and Structure of ‘Why’

4.1 Introduction

The adjunct *wh*-phrase ‘why’ has a variety of distributions across languages. In Spanish *por qué* ‘why’ occurs in Spec,CP, either having moved there or been merged directly into that position (Ochi 2014).¹

- (1) a. *Por qué* miró Juan a María?
 why looked at Juan A María
 ‘Why did Juan look at/watch María?’
 b. *Por qué* Juan miró a María?
 why Juan looked at A María
 ‘Why did Juan look at/watch María?’
- (2) a. *Qué* vio Juan?
 what saw Juan
 ‘What did Juan see?’
 b. **Qué* Juan vio?
 what Juan saw
 ‘What did Juan see?’

In (1a) *por qué* has moved into Spec,CP, as indicated by the Aux inversion, while in (1b) *por qué* has apparently been directly put into this position, which is suggested by the absence of Aux inversion. As shown in (2b), for an argument *wh*-phrase such as *qué* ‘what’, Aux inversion must take place, indicating that argument *wh*-phrases always begin in their expected position within the TP and move to Spec,CP by *wh*-movement. Further evidence for the movement/non-movement of *por qué* is shown below (Uriagereka 1988, Boeckx 2008, Ochi 2014).

- (3) a. **Por qué** pensaste tú que Juan vio a María? (ambiguous)
 why thought you that Juan saw A María
 ‘Why did you think that Juan saw María?’

- b. **Por qué** tú pensaste que Juan vio a Maria? (unambiguous)
 why you thought that Juan saw A Maria
 ‘Why did you think that Juan saw Maria?’

In (3a) the scope of *por qué* is ambiguous between the matrix and subordinate clauses, while it only has matrix scope in (3b). These observations are consistent with the fact that in (3a) *por qué* has undergone movement to the matrix Spec,CP as indicated by the Aux inversion, and the movement could have been initiated in the matrix or the subordinate clause. In (3b), the absence of Aux inversion suggests that *por qué* has been directly inserted into the Spec,CP without having moved there, hence there is no Aux inversion, and there is no possibility of *por qué* taking subordinate-clause scope.

Based on these observations, Ochi (2014) proposes the following.

- (4) Distribution of ‘why’
- (i) Reason *wh*-adjuncts (e.g., *por qué*, *why*, *weishenme*, *naze*) are base generated in the CP periphery or elsewhere (i.e., within TP).
 - (ii) Causal *wh*-adjuncts fall into the following two groups:
 - a. Many of them (e.g., *how come*, *why the hell*, *zenme* (Chinese), and so on) are always base generated in the left periphery of an interrogative CP.
 - b. A species of causal *wh*-adjuncts in Chinese and Japanese is a V'-level adjunct.

For (4i), we saw that *por qué* may be base generated in Spec,CP or moved there from somewhere lower in the structure. For (4iia), Collins (1991) has observed that *how come* in English is always base generated in the Spec,CP where it takes its scope.

- (5) a. How come you left?
 b. *How come did you leave?
 c. How come John said Mary left?

How come never triggers Aux inversion, as shown in (5b), and like *por qué* inserted directly into Spec,CP where it takes scope. *How come* can only take scope in the clause where it occurs. Hence, (5c) is unambiguous. Finally, (4iib) refers to constructions like the following, in which *nani* ‘what’ is used as an adjunct to mean ‘why’ (e.g., Kurafuji 1996, 1997; Ochi 1999, 2004).

- (6) Hanako-wa nani-o hasit-te iru no?
 Hanako-TOP what-ACC run-ing Q
 ‘Why is Hanako running?’

I will go over this and other types of ‘why’ in this chapter. I will also address the difference in meaning between “reason” and “cause,” which turns out to be crucial for the structural analysis of (i) and (ii).

4.2 ‘Why’ as a Base-Generated *Wh*-Adjunct

The idea that ‘why’ may be base generated in the Spec,CP where it takes scope has been proposed by a number of linguists going back to Rizzi (e.g., Rizzi 1990, 2001; Ko 2005; Stepanov and Tsai 2008). This idea is predated by a proposal of the same kind by the philosopher Bromberger (1987, revised in 1992). We saw that *how come* is a base-generated *wh*-adjunct. In Chinese, *zenme* ‘how come’ has the same base-generated property. Tsai (2008) points out that *zenme* cannot be placed in a lower clause with the intent of covertly moving to the matrix Spec,CP, as other *wh*-phrases can.

- (7) *Akiu renwei [Xiaodi zenme hui chiuli zhe-jian shi]?
 Akiu think Xiaodi how will handle this-CL matter
 ‘How come Akiu thinks Xiaodi will handle this matter *t*?’

If, instead of *zenme*, we use the “regular” ‘why’ phrase *weishenme*, this sentence will be grammatical with the intended reading of ‘Why does Akiu think that Xiaodi will handle this matter *t*’.

4.2.1 A Gap in the Paradigm

There is an interesting gap in the paradigm for Japanese. Contrary to Ochi’s (2014) claim that the Japanese ‘why’ *naze* may be base generated in Spec,CP, there is no evidence for this. One piece of putative evidence given in the literature for this is the observation that *naze* can overcome an intervention effect (Miyagawa 1997b, Ko 2005).

- (8) a. *Hanako-sika dare-ni erab-are-nakat-ta no?
 Hanako-only who-by choose-PASS-NEG-PST Q
 ‘By whom was only Hanako chosen?’
 b. Hanako-sika naze erab-are-nakat-ta no?
 Hanako-only why choose-PASS-NEG-PST Q
 ‘Why was only Hanako chosen?’

Ko (2005), following Bromberger (1987, 1992) and Rizzi (1990), argues that *naze* is base generated in Spec,CP, so it does not need to move to take scope, thus it is not subject to the intervention effect that *wh*-phrases that must move to Spec,CP face, as we see in (8b). By her account, anything that occurs to the left of *naze* has moved there by scrambling. She in fact shows

that only languages that have robust scrambling, such as Japanese and Korean, but not Chinese, have this “anti-intervention” effect for ‘why’. Later, I will develop an analysis of *naze* in the spirit of Ko, but without assuming that *naze* is base generated in Spec,CP.

As I will show later, the anti-intervention effect of *naze* is not an indication that *naze* is base generated in Spec,CP. We will in fact see that *naze* is base generated lower than CP, sometimes as low as inside the *v*P. Japanese does not have anything like the Chinese *zenme* ‘how come’ or the English *how come* that must be base generated in the Spec,CP where it takes scope. Although Ochi lists *naze* as having the potential to be base generated, he gives no evidence for it.

In the absence of evidence for base generation of *naze*, I will assume that *naze* is always merged somewhere lower than CP, and takes scope at Spec,CP by moving there. I will discuss the mechanics of this later, but for now, let us reflect on why there is this apparent gap in Japanese. English has *how come*, Chinese has *zenme*, and Spanish has *por qué*, all either obligatorily inserted into Spec,CP where they take scope (*how come*, *zenme*) or with an option to do so (*por qué*). Recall the typology of languages based on Strong Uniformity.

(7) Some predicted languages based on Strong Uniformity

Category I: C_{ϕ}, T_{δ} – Japanese, Korean

Category II: C_{δ}, T_{ϕ} – Chinese, English

Category III: $C, T_{\phi/\delta}$ – Spanish

Category IV: $C_{\phi/\delta}, T$ – Dinka

In Category II and IV languages, the δ -feature stays at C. In Category III, the δ -feature may lower to T; this is for Spanish, and the evidence for this lowering we saw is the δ -feature of topic.

In Miyagawa (2010) I argued, following other linguists (e.g., Rizzi 1997), that focus is a key feature in *wh*-constructions. A *wh*-phrase undergoes movement because of its focus feature and the δ -feature of focus at C. It makes sense, then, that in English and Chinese, Category II languages, we find adjunct *wh*-phrases such as *how come* and *zenme*; they can be directly inserted into Spec,CP to check off the focus feature. What about Spanish? The argument that the δ -feature may be inherited by T is based on topicalization (Jiménez-Fernández 2010). There is no evidence that the focus δ -feature lowers to T in Spanish. In fact, given that it is a *wh*-movement language, in which *wh*-phrases move to Spec,CP, the evidence indicates that in Spanish, the focus δ -feature stays at C. Thus Spanish, a Category III language at least for the topic δ -feature, has its focus δ -feature at C and *por qué* can be inserted

directly at Spec,CP to check the focus feature. Finally, Strong Uniformity predicts that Category I languages such as Japanese and Korean would never have a base-generated 'why'.

In the remainder of this chapter, I will look at *naze* in Japanese, making comparisons to Chinese at several points. I will also look at the use of *nani* 'what' as 'why'. This use of 'what' in languages such as German is limited to base generation in Spec,CP (Ochi 1999).

- (8) a. Warum glaubst du dass er so lange schläft? (ambiguous)
 why believe you that he so long sleeps
 'Why do you believe that he sleeps so long?'
 b. Was glaubst du dass er so lange schläft? (unambiguous)
 what believe you that he so long sleeps
 'Why (the hell) do you believe that he sleeps so long?'

One finds this use in Japanese, but as a number of linguists have pointed out, *nani* 'what' in this construction occurs low in the structure, somewhere within the verbal projection. We don't find it base generated in Spec,CP as we see in German.

There is one point I should make about focus and 'why'. Our proposal is that the gap in the paradigm in Japanese—the absence of 'why'-type expressions externally merged at the C region—has to do with Strong Uniformity. Since Japanese is a Category I language, the δ -feature at C is inherited by T; the feature relevant to our discussion is focus, which has been argued to play a role in *wh*-constructions. Rizzi (1999) has observed that focus is relevant to all *wh*-phrases save one: the 'why' *wh*-phrase does not appear to be associated with focus. Hence, in his system, 'why' occurs in IntP instead of FocP, where the other *wh*-phrases occur. However, there is evidence from Portuguese that when 'why' is externally merged to the Spec,CP where it takes scope, this involves focus.

In European Portuguese, an argument *wh*-phrase that has been moved to Spec,CP cannot carry focus stress.²

- (9) a. O que leste?
 what (you) read
 'What did you read?'
 b. *O quê leste?

The difference is between *o que* in (9a) and *o quê* in (9b). There is no focus stress in the former and a focus stress in the latter, and only the unfocused 'what' is grammatical. For 'why', both the unstressed and stressed versions are possible.

- (10) a. Porque veio o João?
 why came João
 ‘Why did João come?’
 b. Porquê o João veio?
 why João came
 ‘Why did João come?’

In (10a), the unstressed ‘why’ is accompanied by verb inversion, signaling that *porque* has moved to Spec,CP, just as we saw for Spanish. In (10b), ‘why’ is focus stressed and there is no inversion, indicating that this stressed ‘why’ has externally merged into Spec,CP. This suggests that externally merged ‘why’ targets focus just like the other *wh*-phrases. Furthermore, there is a scope difference between the unfocused and focused ‘why’.

- (11) Porque é que disseste que o João veio para Boston?
 why say that João came to Boston
 ‘Why (unstressed) did you say that João came to Boston?’
 Ambiguous:
 a. Porque tu querias saber.
 ‘Because you wanted to know.’
 b. Porque foi estudar para o MIT.
 ‘Because he went to study at MIT.’
- (12) Porquê disseste que o João veio para Boston?
 why said that João came to Boston
 ‘Why (stressed) did you say that João came to Boston?’
 Unambiguous:
 a. Porque tu querias saber.
 ‘Because you wanted to know.’
 b. #Porque foi estudar para o MIT.
 ‘Because he went to study at MIT.’

Only the unfocused ‘why’ leads to ambiguity of scope, which indicates that the focus-stressed ‘why’ is externally merged at the matrix Spec,CP and only takes scope there, as we saw from Spanish. Based on these pieces of evidence from European Portuguese, I will assume that the external-merge option for ‘why’ exists only for languages that have the focus δ -feature at C, leading to the prediction that in Class I languages (Japanese, Korean), the external-merge option is not available.³ Later in the chapter, I will give an additional piece of evidence that ‘why’ with focus stress is associated with the focus feature. Below, I will develop an analysis of ‘why’ based on Shlonsky and Soare (2011) and Beck (1995, 1996b) in order to capture the distribution of ‘why’ across languages relative to the external-merge option.

4.3 Three Observations about Naze 'Why'

Linguists have observed a number of unusual properties associated with the Japanese *wh*-word *naze* 'why'. I will take up three of these properties. The first is referred to in the literature as *anti-superiority*; I will call the other two *anti-intervention* and *anti-pied-piping*. I will demonstrate that these three peculiar properties observed for *naze* point to general properties of 'why' across languages, even those languages where these properties have not been isolated as topics of research. To account for these properties, I will propose a structure for 'why' that combines and extends the work in Shlonsky and Soare (2011) and Beck (1995, 1996b).

The first property, anti-superiority, observed by Saito (1982, 1985), requires that, in a multiple *wh*-question that contains *naze* 'why', this *wh*-word is not the first *wh*-phrase in the question.

Anti-superiority (Saito 1982, 1985): ✓*wh naze*, ??*naze wh*

- (13) a. Taroo-wa nani-o naze katta no?
 Taroo-TOP what-ACC why bought Q
 'Why did Taro buy what?'
 b. ??Taroo-wa naze nani-o katta no?
 Taroo-TOP why what-ACC bought Q
 'Why did Taro buy what?'

As shown in (13b), the sentence degrades if *naze* is the first *wh*-phrase. This is called anti-superiority, reflecting the fact that *naze* appears to violate the otherwise strict superiority requirement that has the higher quantificational element at overt syntax always taking scope over the lower element. This strict requirement is demonstrated extensively in Hoji (1985). Because *naze* is an adjunct *wh*-phrase, it must raise to Spec,CP first (e.g., Chomsky 1981, Lasnik and Saito 1984). Yet, as we see above, *naze* must occur lower than the other *wh*-phrase, thus ostensibly violating superiority. The anti-superiority violation in (13b) can be saved by inserting a third *wh*-phrase to the left of *naze* (Saito 1994; see also A. Watanabe 1992; S. Watanabe 1994, 1995, 2000).

- (14) Additional-*wh* effect
 Dare-ga naze nani-o katta no?
 who-NOM why what-ACC bought Q
 'Why did who buy what?'

This is consistent with the anti-superiority property of *naze*: it cannot be the first *wh*-phrase in a multiple *wh*-question.

The second property of *naze* that I will take up is observed in intervention environments, and I will call it anti-intervention. Japanese evidences intervention effects of the type studied by Beck (1996a).⁴ This is demonstrated with the negative-sensitive focus marker *-sika* ‘only’ in (15) below; this focus marking is on the subject *Hanako*, and it functions as an intervenor preventing the *wh*-phrase ‘by-who’ from taking scope (Takahashi [1990] originally observed the intervention effect triggered by *-sika*).

- (15) *Hanako-sika dare-ni erab-are-nakat-ta no?
 Hanako-only who-by choose-PASS-NEG-PST Q
 ‘By whom was only Hanako chosen?’

All *wh*-phrases are subject to this intervention effect save one. As noted in Miyagawa (1997b), *naze* is able to survive in an intervention environment.

Anti-intervention (Miyagawa 1997b)

- (16) Hanako-sika naze erab-are-nakat-ta no?
 Hanako-only why choose-PASS-NEG-PST Q
 ‘Why was only Hanako chosen?’

Ko (2005) provides cross-linguistic confirmation, from Korean, of the anti-intervention effect with ‘why’.

- (17) a. ***Amwuto**/***John-pakkey** mwues-ul (Beck and Kim 1997)
 Anyone/John-only what-ACC
 ilk-ci-anh-ass-ni?
 read-CI-not-PST-Q
 ‘What did no one/only John read?’
 b. **Amwuto**?**John-pakkey** way ku chayk-ul (Ko 2005)
 Anyone/John-only why that book-ACC
 ilk-ci-anh-ass-ni?
 read-CI-not-PST-Q
 ‘Why did no one/only John read that book?’

The third peculiar property of *naze*, noted by Nishigauchi (1986, 1990; see Huang 1982 for an earlier related study based on Chinese) is what I will term anti-pied-piping. Japanese does not exhibit complex-NP and adjunct island constraints.

- (18) Taroo-wa [nani-o yonda hito]-to hanasita no?
 Taro-TOP what-ACC read person-ACC spoke Q
 Lit. ‘What did Taro speak with the person who read?’
 (19) Hanako-wa [Taroo-ga nani-o katta kara] okotta no?
 Hanako-TOP Taro-NOM what-ACC bought because become.angry Q
 Lit. ‘What did Hanako become angry because Taro bought?’

A leading idea is that in these constructions, the entire island that contains the *wh*-phrase is pied-piped to Spec,CP, thereby circumventing an island violation (Nishigauchi 1986, 1990; Choe 1987; Richards 2008). However, *naze* is unable to avoid an island violation (Nishigauchi 1986, 1990).

Anti-pied-piping

- (20) *Taroo-wa [sono hon-o naze katta hito]-to hanasita no?
 Taroo-TOP that book-ACC why bought person-ACC spoke Q
 Lit. 'Why did Taro speak with the person who bought that book?'
- (21) *Hanako-wa [Taroo-ga naze kaetta kara] okotta no?
 Hanako-TOP Taroo-NOM why went.home because become.angry Q
 Lit. 'Why did Hanako become angry because Taro went home?'

This is what I term the anti-pied-piping property of *naze*.

What I wish to demonstrate is that anti-superiority is a reflection of a general property of 'why' across languages, and that anti-intervention and anti-pied-piping also are a reflection of general properties, in these cases involving the language typology of agreement-based and discourse-configurational languages.

As an illustration of the universality of anti-superiority, let us look at English, Chinese, and Romanian. In English, there is no anti-superiority in the overt form; in fact the overt form must have *why* as the first *wh*-phrase (e.g., Lasnik and Saito 1984).

(22) Why did you buy what?

However, despite the surface ordering, the most natural interpretation of this example as a pair-list question has *what* being interpreted as the left-most *wh*-phrase. So, (22) is most easily interpreted as a question in which, for a given set of objects (*what*), one would give the reason for purchasing each object. The other order is not completely out, but it is not the preferred interpretation and if one were to interpret the sentence with this order, it would strongly favor a single-pair answer instead of a pair-list one. So, at the interpretive level, we find the anti-superiority ordering even in English.

In Chinese, if two *wh*-phrases occur in an indirect question, and one of them is *weishenme* 'why', then *weishenme* and the other *wh*-phrase cannot both take scope within the indirect question. Crucially, the scope is asymmetrical, with *weishenme* necessarily taking lower scope than the other *wh*-phrase (Huang 1982, 526; see also Takita and Yang 2014). This again is an instance of anti-superiority.

- (23) Ni xiang-zhidao [Lisi **weishenme** mai-le **shenme**]?
 you want-know Lisi why buy-LE what
 (i) Lit. ‘What do you wonder [Lisi bought *t* why]?’
 (ii) *Lit. ‘Why do you wonder [Lisi bought what *t*]?’

Finally, in Romanian, a multiple-*wh*-fronting language (Rudin 1988), there is the restriction that ‘why’ cannot occur as the left-most *wh*-phrase (Soare 2009, Shlonsky and Soare 2011), paralleling the anti-superiority construction in Japanese.

- (24) a. Cine de ce a plecat?
 who why has left
 ‘Who left and why?’
 b. *De ce cine a plecat?
- (25) a. Pe cine de ce ai întrebat despre accident?
 ACC who why have (you) asked about accident
 ‘Who did you ask about the accident and why?’
 b. *De ce pe cine ai întrebat despre accident?
- (26) a. ?Când de ce l-ai văzut?
 when why him-have (you) seen
 ‘When did you see him and why?’
 b. *De ce când l-ai văzut?

4.4 ‘Why’ Moves (Shlonsky and Soare 2011)

Many have argued that ‘why’ is *externally merged* at the left periphery of the clause (e.g., Bromberger 1987, 1992; Hornstein 1995; Ko 2005; Rizzi 1990, 2001; Stepanov and Tsai 2008; Thornton 2008). Ko (2005), for example, uses the external-merge analysis to account for the anti-intervention effect by noting that on this analysis, ‘why’ is already in Spec,CP, so there is no reason for it to move to take scope, hence no intervention effect arises.

Rizzi (2001), who was an early proponent of the external-merge approach (Rizzi 1990), offers a detailed analysis within cartography. He argues that the Italian ‘why’ *perché* is base generated in Spec,Int(errogative), which is higher than Spec,Foc, the position to which other *wh*-phrases move.

- (27) *Perché* is not associated with focus (Rizzi 1999)
 a. ***A chi** QUESTO hanno detto (non qualcos’altro)? (Rizzi 1999, 4)
 to who this said not something else
 ‘To who did they say THIS (not something else)?’

- b. **Perché** QUESTO avremmo dovuto dirgli, (Rizzi 1999, 7)
 why this we should have tell.him
 non qualcos’altro?
 not something else
 ‘Why should we have said THIS to him, not something else?’

In (27a), *a chi* ‘to whom’ cannot co-occur with the focused *QUESTO*, while (27b) shows that *perché* is fine with it. On the assumption that only one focused element can occur within a clause, (27b) indicates that *perché* is not associated with focus. Based on this and other observations, Rizzi argues that *perché* is externally merged into Spec,Int, which is higher than Spec,Foc.

One problem that the external-merge approach to ‘why’ faces is that, as we saw at the outset of this chapter, there is a difference between unfocused (moved) and focused (externally merged) ‘why’ in European Portuguese. Second, it is not hard to find cases where ‘why’ clearly has moved in languages such as English.

(28) Why did you say that John left? (ambiguous)

As Shlonsky and Soare (2011) point out, this is not expected on the external-merge approach because the external merging of ‘why’ is to a scope position, hence Criterial Freezing should prohibit movement of ‘why’ from the externally merged position. See Ko (2005), who is aware of this problem for the external-merge approach to ‘why’. Below, we will see evidence that ‘why’ always moves.

4.4.1 Problem for the External-Merge Hypothesis: ‘Why’ Apparently Always Moves

Shlonsky and Soare (2011) give an argument that ‘why’ moves. I will go over their analysis in some detail because I will adopt their proposal of “ReasonP” as the source of ‘why’; I will combine this with a suggestion for ‘why’ by Beck (1995, 1996b) to arrive at a proposal for the general characterization of ‘why’ that accounts for anti-superiority, and, with an additional assumption, also anti-intervention and anti-pied-piping.

Many English speakers do not allow *why* in an infinitival question (the following are taken from Shlonsky and Soare 2011).

- (29) I asked Bill a. whether to serve spiced aubergines for dinner.
 b. who to serve.
 c. what to serve the guests.
 d. when to serve spiced aubergines.
 e. how to serve spiced aubergines.
 f. where to serve spiced aubergines.
 g. ??why to serve spiced aubergines.

- (30) a. Whether to serve spiced aubergines is the big question.
 b. Who to invite for dinner
 c. What to serve the guests
 d. When to serve the spiced aubergines
 e. How to serve spiced aubergines
 f. Where to serve spiced aubergines
 g. ??Why to serve spiced aubergines

The difference disappears in a tensed clause:

- (31) I asked Bill a. whether I should serve spiced aubergines for dinner.
 b. who I should serve.
 c. what I should serve the guests.
 d. when I should serve spiced aubergines.
 e. how I should serve spiced aubergines.
 f. where I should serve spiced aubergines.
 g. why I should serve spiced aubergines.

Shlonsky and Soare argue that the failure of infinitival clauses to host *why* is due to the fact that an infinitival clause is a reduced clause (Hooper and Thompson 1973; Haegeman 2006, 2010). Shlonsky and Soare suggest the following “truncated” structure for infinitival clauses based on Rizzi’s (1997, 2001) clausal structure.

- (32) ForceP > IntP > TopP > FocP > WhP > Fin(ite)P

WhP is a position that, along with FocP, can host a non-*why wh*-phrase. Immediately, we see that if, by the external-merge approach, *why* is externally merged at IntP, the truncated structure in (32) correctly predicts that *why* cannot occur in infinitival clauses.

However, there is evidence that *why* can be externally merged in an infinitival clause although it can’t stay there (Shlonsky and Soare 2011).

- (33) Why did you ask her to resign?
 (a) What is the reason X, such that for X, you asked her to resign?
 e.g., Because I didn’t want to just tell her. (short construal)
 (b) What is the reason X, such that you asked her to resign for that particular reason X?
 e.g., I asked her to resign because of her health, not because of her intelligence ... (long construal)

In (33a), the question targets the reason for asking, but in (33b), the question has to do with the reason for resigning. The latter reading requires that *why*

be associated with the infinitival clause despite the fact that it never appears there.

Based on the possibility of the long construal in (33b), Shlonsky and Soare propose that *why* is externally merged in what they call ReasonP. For the long construal, ReasonP occurs in the infinitival clause, and the *why* inside it moves to the matrix clause.

(34) For the long construal in (31)

[CP ... [ForceP > IntP > TopP > FocP > WhP > ... ReasonP...]

ReasonP is above NegP (e.g., Ko 2005), as seen by the fact that negation does not block local movement of *why*, whereas *how*, which is lower in the structure, is so blocked (Shlonsky and Soare 2011).

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

- (36) a. why ... t_{why} ... NegP
 b. *how ... NegP ... t_{how}

While negation does not block short construal of *why*, the situation changes with long-distance construal, which is blocked by negation (Rizzi 1990).

(37) Why didn't you say Geraldine fixed her bike?

This example only has the interpretation in which *why* is associated with the matrix clause; the subordinate reading is blocked by the matrix negation. Shlonsky and Soare further assume that, based on the anti-intervention facts, ReasonP is higher than the subject, since an intervenor subject does not block *why*, as we saw earlier.

Before turning to additional evidence for the movement of 'why', I would like to return briefly to the discussion of European Portuguese. Recall that there are two versions of 'why', unfocused and focused. The unfocused 'why' moves to Spec,CP, as indicated by the inversion of the verb, while the focused 'why' is externally merged, as we can see by the fact that no verb inversion occurs. The examples are repeated below.

- (38) a. Porque veio o João?
 why came João
 'Why did João come?'
 b. Porquê o João veio?
 why João came
 'Why did João come?'

João Costa, who noted these examples, also notes the following, in which ‘why’ can only occur in an infinitival clause if it is focused.

- (39) Eu não sei ... ‘I don’t know ...’
 a. o que comer. ‘what to eat.’
 b. como comer. ‘how to eat.’
 c. onde comer. ‘where to eat.’
 d. ??porque comer. ‘why to eat.’

As shown, European Portuguese ‘why’ without focus behaves like English *why* in not being able to occur in an infinitival clause. However, ‘why’ becomes fine if it has focus.

- (40) Eu não sei porquê comer.
 I not know why to eat

This puts the focused ‘why’ in the same group as other, non-‘why’ *wh*-phrases, which normally occur in FocP in cartography (and WhP in the infinitive). This is further evidence that the externally merged ‘why’ in European Portuguese has a focus feature, and confirms the assumption that external merge requires the focus feature at C.

4.4.2 Evidence from Chinese for ‘Why’ Movement

One difference between Chinese and Japanese is that, while both are *wh*-in-situ, Japanese exhibits *wh*-island effects (A. Watanabe 1992) while Chinese does not (Huang 1982). This has led to the proposal that Chinese uses unselective binding for *wh*-phrases while Japanese uses movement (Tsai 1994, 1999).

- (41) a. *Kimi-wa [**dare-ga** kuru ka(dooka)] siritai no? (Japanese)
 you-TOP who-NOM come whether want.to.know Q
 ‘Who is the person x such that you wonder whether x will come?’
 b. Ni xiang-zhidao [**shei** lai-bu-lai] (ne)?(Chinese; Tsai 1999, 60)
 you want-know who come-not-come Q
 ‘Who is the person x such that you wonder whether x will come?’

But ‘why’ undergoes movement even in Chinese (Tsai 1994). ‘Why’ with the meaning *for what reason* is island sensitive.

- (42) a. Ni zui xihuan [[**weishenme** gongzuo de] ren]?
 you most like why work DE person
 ‘What is the *reason/purpose x such that you most like [people
 [who work for x]]?’

This example cannot be interpreted with *weishenme* referring to the reason why the people are working.

- b. # Yingwei (ta) you lixinag. (reason answer)
 because he have ideal
 ‘Because he has ideals.’

On the other hand, if *weishenme* is interpreted as asking the people’s purpose for working, the sentence is fine, showing that it is ‘why’ in the reason interpretation that undergoes movement. This is the interpretation we have been dealing with.

- c. Wei-le lixiang. (purpose answer)
 for-LE ideal
 ‘For ideals.’

4.5 The Structure of ‘Why’

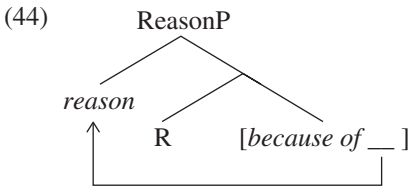
The challenge in capturing the structure and meaning of ‘why’ lies in the fact that this *wh*-phrase, unlike other *wh*-phrases, stands for a clause, not just a phrase, and one that is adverbial in nature (Bromberger 1987, 1992; Rizzi 1990). This adverbial clause goes with the TP that expresses the event or the state for which the reason is sought. In Beck’s analysis (1995, 132; also 1996b), which is semantic in nature, the meaning of ‘why’ decomposes into *because of what*. This *because* clause is the adverbial clause that goes with the TP. To get the scope reading, Beck suggests that *what* in *because of what* is extracted at LF to give the structure [*because of t^{LF}*], with the propositional interpretation of ‘ λq CAUSE_w(p,q)’. The question in (43a) would have a meaning something like (43b) (Beck 1995, 1996b).

- (43) a. Why did Peter leave?
 b. [what reason x, because of x] [Peter left]

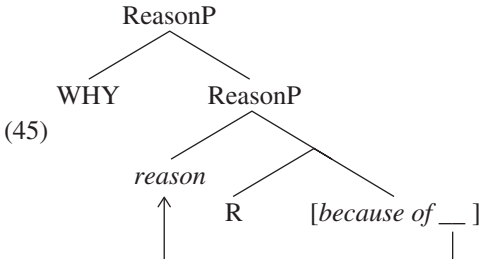
One question for Beck’s approach is, what precisely is the function of the actual word ‘why’? In her analysis, it is the abstract *what* in *because of what* that raises at LF to give scope. But in reality, it is ‘why’ that moves to the local Spec,CP or to a higher Spec,CP to take scope. We therefore need to understand the relationship of the actual word ‘why’ to the *because* adverbial clause.

Let us suppose that Beck’s *because* clause corresponds to Shlonsky and Soare’s (2011) ReasonP. For Shlonsky and Soare, this ReasonP is the source of the word ‘why’; importantly, it is a syntactic entity and not a semantic decomposition of ‘why’ as in Beck’s approach. What we need to do is to reconcile the abstract *because* clause of Beck’s approach with the syntactic ReasonP proposal of S&S, and arrive at the source of ‘why’ from the structure that results from this reconciliation of the two approaches.

A fundamental question for the structure of ‘why’ is, how is it that the word ‘why’ takes on a clausal structure? My proposal takes Beck’s *because* clause not as an abstract semantic decomposition but as a syntactic entity. I will also propose that this clause gives content to a major portion of Shlonsky and Soare’s ReasonP. Following Beck, I assume that the *what* in *because of what* raises, although in Beck’s system, it is not clear to where *what* moves. I will make three specific proposals about this moved element. First, I will give it the full semantic content of *reason* as opposed to just ‘what’. Second, it moves to the specifier of ReasonP.



This creates a structure similar to Beck’s structure, but created at syntax. Third, this entire clausal structure is given phonological representation with insertion of ‘why’, adjoining to ReasonP and having scope over the entire ReasonP.



The insertion of ‘why’ accounts for the fact that this word is always associated with an entire clause, for which I use Shlonsky and Soare’s label of ReasonP. From this position ‘why’ raises to Spec,CP (or Spec,Int) to take scope, leaving a variable in its original position, and the resulting structure is similar to Beck’s representation of ‘why’: *what x, x reason, because of x*. External merge of ‘why’ simply means that ‘why’ would externally merge into Spec,CP and be associated with ReasonP. Because no movement is involved, this construal can only be local. This external merger would be the one exception to Shlonsky and Soare’s claim that ‘why’ always moves.

4.6 Anti-Superiority and the Structure of 'Why'

The main point I wish to pursue about anti-superiority is the following:

(46) Anti-superiority

The anti-superiority seen in Japanese involving *naze* reflects a general property of pair-list questions in language (see S. Watanabe 1994, 1995, 2000, who first noted this idea).

This general property of pair-list questions is that the left-most *wh*-phrase must be D-linked (Comorovski 1996, Hornstein 1995; see also Dayal 1996). This is shown in a couple of English examples from Bolinger (1978).

- (47) a. It's nice to have all those times scheduled, but when are you doing what?
 (#But what are you doing when?)
 b. It's nice to have all those activities ahead of you, but what are you doing when?
 (#But when are you doing what?)

In (47a), the first clause sets up *all those times* as a topic in the conversation, so that a natural pair-list question is to have *when* be the first *wh*-phrase as the anchor, followed by another *wh*-phrase. In (47b) the situation is the opposite; now it is the activities that are situated in the discourse, so the natural pair-list question is one that has *what* referring to the activities as the left-most *wh*-phrase. I will demonstrate that the proposed structure of 'why' provides a structural explanation for why 'why' cannot play this role as the "anchor" in a pair-list question.

The reason why 'why' cannot play this role as the left-most *wh*-phrase in a pair-list question is because it refers to a property, not to individuals (S. Watanabe 1994, 1995, 2000; based on Chierchia 1992–1993, Hornstein 1995; see also Aoun 1985; Bromberger 1987, 1992; Cinque 1990; Kuno and Takami 1993). This is why even in English, in which *why* occurs as the first *wh*-phrase in a multiple *wh*-question, it doesn't naturally get interpreted as the left-most *wh*-phrase in pair-list question.

(48) Why did you buy what?

Which *x*, *x* a thing [from the set understood in discourse]: anchor
 Reason ranges over this set, and *not the other way around*.

Similarly in Chinese, two *wh*-phrases, one of which is *weishenme*, in an indirect question may occur in either order in surface form, but they cannot both be interpreted inside the indirect question. Rather, one must take matrix scope, and it cannot be *weishenme* (Huang 1982, 526).

- (49) Ni xiang-zhidao [Lisi **weishenme** mai-le **shenme**?]
 you want-know Lisi why buy-LE what
 (i) Lit. ‘What do you wonder [Lisi bought *t* why]?’
 (ii) *Lit. ‘Why do you wonder [Lisi bought what *t*]?’

We saw that Romanian is identical to Japanese in not allowing ‘why’ to occur as the left-most *wh*-phrase in multiple *wh*-fronting questions.

Why is it that ‘why’ cannot be D-linked, depriving it of the ability to function as the anchor in a pair-list question? Intuitively, ‘why’ is a sentential adverb (Bromberger 1987, 1992; Rizzi 1990), which we captured with the placement of ReasonP above TP (Beck 1995, Shlonsky and Soare 2011). As we will see, our account of ‘why’ as a sentential adverb in turn accounts for the anti-intervention effect of ‘why’. To see this, we will first turn to another kind of *wh*-question, the ‘how many’ question, which contains scope ambiguity.

How many

- (50) How many people do you think I should talk to?
 (i) For what *n*: there are *n*-many people *x*, such that you think I should talk to *x*. (outer reading)
 (ii) For what *n*: you think it should be the case that there be *n*-many people that I talk to. (inner reading)

The so-called outer reading presupposes the existence of certain people (Lahiri 2002; cf. Cresti 1995). On this reading of the question, the answer may consist of actual people: “You should talk to John, Mary, and Sally.” In contrast, for the inner reading, there is no presupposition; it is purely a question about a number (“You should talk to three people”). A good example of the inner reading is the poll-taking question: “How many people should I talk to to obtain a valid poll result?”

An interesting property of the outer and inner readings that is directly pertinent to our proposal for ‘why’ is the following:

- (51) (At least for some *wh*-chains), if it is interpreted as *presuppositional*, all parts of the *wh*-phrase are interpreted high in the structure, while if it is interpreted as *non-presuppositional*, some relevant part of the *wh*-phrase is interpreted low in the structure.

In the example in (50), the outer reading has both the operator part of the *wh*-phrase and the restriction interpreted in CP (*for what n: there are n-many people x ...*); in the inner reading, the operator portion (*for what n*) occurs in the CP, but the restriction (*n-many people*) occurs lower in the structure.

Evidence that in the outer reading the restriction is interpreted high, with the operator, and that in the inner reading it is interpreted lower, away from the operator, can be found in island and intervention environments. In these environments, the inner reading (non-presuppositional) is not possible (Rizzi 1990, Beck 1995, Cresti 1995; see also Frampton 1990).

- (52) a. How many people do you wonder whether I should talk to?
(wh-island)
- (i) For what n: there are n-many people x, such that you wonder whether I should talk to x.
 - (ii) *For what n: you wonder whether it should be the case that there be **n-many** people that I talk to.
- b. Wieviele Hunde hat Karl nicht gefüttert? (negative island)
 how many dogs has Karl not fed
- (i) For which n: there are n dogs that Karl didn't feed.
 - (ii) *For which n: it is not the case that Karl fed n dogs.

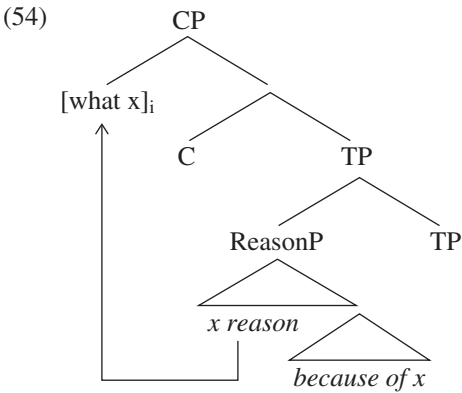
In the example in (a), the 'how many' phrase has crossed a weak island, and in (b), it has crossed the negation, which is an intervenor. In both cases, the most natural interpretation is the outer reading, in which there is a presupposed group of people (a) or dogs (b) about which the question is being asked. The inner reading is difficult, if not impossible, because an intervenor occurs between the operator and its restriction (Pesetsky 2000).

What we have, then, is the following. In order for a *wh*-phrase to be presuppositional, all of its portions—operator and restriction—must be interpreted high (Spec,CP). If not, it cannot be presuppositional. Given what we said about 'why', that it cannot be D-linked, and therefore cannot be presuppositional, we can derive this property of 'why' if it has a structure in which some part must always occur lower in the structure than the operator portion. I will propose such a structure for 'why'.

Returning to the anti-superiority property of 'why', we can now give a principled reason why this property is associated with this *wh*-phrase.

- (53) The restriction of 'why' is always interpreted lower in the structure than the operator.

This is because of the structure of ReasonP: part of the meaning of 'why', after 'why' is extracted to Spec,CP, is *because of x*.



The *because* clause is the restriction of ‘why’, and it is always interpreted lower than CP. Hence, we expect that ‘why’ cannot have a presuppositional meaning. This is true even for externally merged ‘why’, which is accompanied by the ReasonP that holds its restriction, and the ReasonP occurs lower than Spec,CP as above.

4.7 Evidence That *Naze* Can Occur Low in the Structure

The external-merge hypothesis about ‘why’ (e.g., Bromberger 1987, 1992; Rizzi 1990; Ko 2005) predicts that, in a simplex question, ‘why’ does not occur lower than Spec,CP (or Spec,IntP). I will give evidence that *naze* can in fact occur lower than Spec,CP. Later, I will show that Ko’s insight, that ‘why’ divides the sentence into those constituents that are scrambled to its left of and the nonscrambled constituents that occur to its right, is fundamentally correct. I will capture this insight not at the CP level as Ko proposed, but at the TP level.

One prediction of the external-merge hypothesis about ‘why’ is that anything that occurs to the left of ‘why’ has moved there by scrambling (Ko 2005, 2006). Under this approach, the object in the following example that occurs to the left of *naze* has scrambled and adjoined to CP above *naze*.

- (55) Ronbun-o naze Taroo-ga tookoosi-nakat-ta no?
 paper-ACC why Taroo-NOM submitted-NEG-PST Q
 ‘Why didn’t Taro submit his paper (for publication)?’

To check this prediction, we can look at certain types of verb phrase idioms that have the property that the object portion of the idiom may undergo “short” scrambling within the verb phrase, but it cannot scramble higher to the left of the subject. The following is an example of such an idiom.

- (56) a. Tanaka-wa mune-o itamete-iru.
 Tanaka-TOP chest-ACC hurt
 'Tanaka is worried.'
- b. Tanaka-wa mune-o yoku itamete-iru.
 Tanaka-TOP chest-ACC frequently hurt
 'Tanaka is often worried.'
- c.*Mune-o Tanaka-wa itamete-iru.
 chest-ACC Tanaka-TOP hurt
 'Tanaka is worried.'

(56b) shows that the object portion of the idiom, *mune-o* 'chest-ACC', may undergo short scrambling within the verb phrase across the adverb 'frequently'. The example in (56c) shows that the object cannot scramble to the TP region, to the left of the subject. Now note the following example with *naze*.

- (57) Tanaka-wa mune-o naze itamete-iru no?
 Tanaka-TOP chest-ACC why hurt Q
 'Why is Tanaka worried?'

The object *mune-o* 'chest-ACC' occurs to the left of *naze*. Under the external-merge hypothesis, this object along with the subject must have scrambled above Spec,CP, which hosts *naze*. However, we saw that with this idiom, the object cannot scramble out of the verb phrase, which indicates that in this example, the object must have scrambled within the verb phrase across *naze*. In turn, the example shows that *naze* occurs in the verb phrase, contrary to the prediction of the external-merge hypothesis. The following is another idiom that demonstrates the same point.

- (58) a. Ano gakusei-tati-ga kao-o awaseru.
 Those students-NOM face-ACC fit.together
 'Those students will meet.'
- b. Ano gakusei-tati-wa kao-o yoku awaseru.
 those students-TOP face-ACC frequently fit.together
 'Those students meet frequently.'
- c.*Kao-o ano gakusei-tati-wa yoku awaseru.
 face-ACC those students-TOP frequently fit.together
 'Those students meet frequently.'
- d. Ano gakusei-tati-wa kao-o naze awasete-iru no?
 those students-TOP face-ACC why fit.together-PROG Q
 'Why are those students meeting?'

The example in (58b) shows that the object portion of the idiom, *kao-o* 'face-ACC', may undergo short, verb-phrase-internal scrambling, while (58c)

indicates that this object cannot undergo scrambling to a higher region, TP or CP. The example in (58d) demonstrates that it is fine to have the object precede *naze*, which demonstrates that *naze* in this example occurs within the verb phrase and not in any higher position.

Another argument to show that *naze* may occur low in the structure comes from verb-phrase preposing. The following construction involves the verb phrase fronting to a position above the subject (Hoji, Miyagawa, and Tada 1989, Yatsushiro 1997).

- (59) [Ano gakusei-o home-sae] Hanako-ga sita.
 that student-ACC praise-even Hanako-NOM did
 ‘Even praise that student, Hanako did.’

We can see that the moved element is the entire verb phrase by the fact that the object cannot be left behind.

- (60) *[Home-sae] Hanako-ga ano gakusei-o sita.
 praise-even Hanako-NOM that student-ACC did
 ‘Even praise that student, Hanako did.’

As shown below, it is possible for *naze* to occur inside the moved verb phrase, showing that *naze* may occur low in the structure in the verb phrase.⁵

- (61) [Ano gakusei-o naze home-sae] Hanako-ga sita no?
 that student-ACC why praise-even Hanako-NOM did Q
 ‘Why did Hanako even praise that student?’

Recall that the anti-intervention property of *naze* in Japanese and *way* in Korean led Ko (2004, 2005) to propose the external-merge analysis of ‘why’ in these languages.

- (62) a. Hanako-sika naze erab-are-nakat-ta no? (Miyagawa 1997b)
 Hanako-only why choose-PASS-NEG-PST Q
 ‘Why was only Hanako chosen?’
 b. **Amwuto/?John-pakkey** way ku chayk-ul (Ko 2005)
 Anyone/John-only why that book-ACC
 ilk-ci-anh-ass-ni?
 read-CI-not-PST-Q
 ‘Why did no one/only John read that book?’

We saw above that *naze* can be merged low in the structure, as low as the verb phrase. It is possible that in these anti-intervention contexts, *naze* is merged directly into Spec,CP, as Ko has argued. That this isn’t the case is shown below. Thanks to Tomonori Otsuka of Kyushu University for the example. The context he gives is: a student is misbehaving, and only Hanako is willing to warn the student.

- (63) ?[Ano gakusei-o naze tyuuisi-sae] Hanako-sika si-nakat-ta no?
 that student-ACC why warn-even Hanako-only do-NEG-PST Q
 'Why did only Hanako even warn that student?'

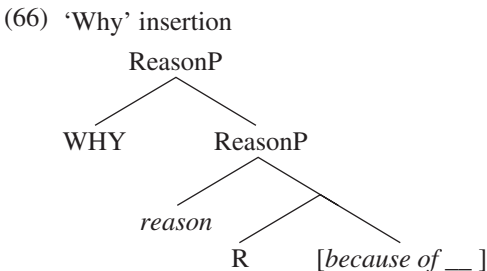
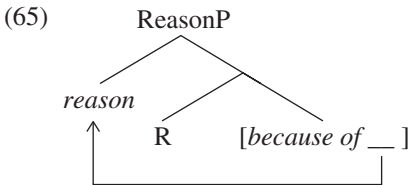
The sentence is awkward because there are two focused elements, the verb phrase with 'even' and the subject with 'only', but beyond this, the sentence is grammatical, showing that a *naze* that is merged as low as within the verb phrase is capable of anti-intervention. Compare this to an argument *wh*-phrase, which is ungrammatical.

- (64) *Dono gakusei-o tyuuisi-sae Hanako-sika si-nakat-ta no?
 which student-ACC warn-even Hanako-only do-NEG-PST Q
 'Which student did Hanako even warn?'

An important point to note about "low-occurring" *naze* is that, despite its position in, for example, the verb phrase, as we saw above, it is interpreted above the TP. For example, in the anti-intervention example above, in which *naze* occurs within the fronted verb phrase, *naze* still has scope over the entire sentence and not just the verb phrase. This is why *naze* is able to overcome the intervention. This means that *naze* must undergo movement, but to where does it move? I will argue that it does not move directly to Spec,CP, but rather, to the ReasonP. It is this movement to ReasonP that leads to anti-intervention and anti-pied-piping.

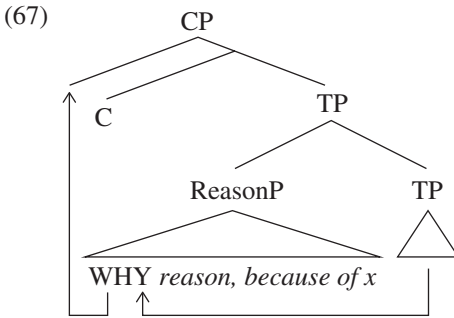
4.8 The Two-Tier Movement Analysis of 'Why'

I proposed the following for the basic structure of the 'why' that is not externally merged.



Modifying the idea in Beck (1995, 1996b), the idea is that a ‘why’ clause begins as *because of what*, and the *what* raises to the specifier of ReasonP. At this point, the actual word ‘why’ is inserted to give phonological value to the entire ReasonP, giving ‘why’ the clausal adverbial meaning.

What we saw from Japanese is that *naze* may be merged lower than TP, as low as in the verb phrase. In a language such as Japanese, then, ‘why’ is merged low in the structure, and moves to Spec,ReasonP to compose the ReasonP. This is what I call the two-tier movement analysis of ‘why’. As we will see, not every language allows this two-tier movement.



Importantly, the first movement from within TP to ReasonP is not to take scope, but to give ReasonP a phonological value. This gives an explanation for the anti-intervention.

- (68) Hanako-sika naze erab-are-nakat-ta no? (Miyagawa 1997b)
 Hanako-only why choose-PASS-NEG-PST Q
 ‘Why was only Hanako chosen?’

Naze occurs lower than the subject, which is an intervenor due to the focus marker *-sika* ‘only’. *Naze* undergoes covert movement to ReasonP, located above the subject. This movement is not for scope taking, hence it is not flagged by the intervenor. This proposal has an advantage over Ko’s (2005) external-merge analysis in that there is no need to assume that anything to the left of ‘why’ has scrambled above Spec,CP. In (68), we can continue to assume that the subject is in its standard Spec,TP position.

Once ‘why’ moves to ReasonP, it then undergoes movement to Spec,CP (or Spec,IntP); unlike the first movement, this second movement is for taking scope. It is this second, scope-taking movement that gets flagged in long-distance movement of *naze*.

- (69) *Hanako-sika [Taroo-ga naze erab-are-ta to] iw-anakat-ta no?
 Hanako-only Taro-NOM why choose-PASS-PST C say-NEG-PST Q
 'Why did only Hanako say that Taro was chosen?'

This is the same as the blocking of long-distance movement of *why* in English (Rizzi 1990).

- (70) *Why_i don't you think [Mary quit her job t_i]?

The two-tier movement analysis of 'why' readily accounts for another peculiar property of *naze*. Recall that Japanese, a *wh*-in-situ language, does not evidence complex-NP and adjunct island violations.

- (71) Taroo-wa [nani-o yonda hito]-to hanasita no?
 Taro-TOP what-ACC read person-with spoke Q
 Lit. 'What did Taro speak with the person who read?'
- (72) Hanako-wa [Taroo-ga nani-o katta kara] okotta no?
 Hanako-TOP Taro-NOM what-ACC bought because become.angry Q
 Lit. 'What did Hanako become angry because Taro bought?'

According to the pied-piping analysis (Nishigauchi 1986, 1990; Choe 1987; Richards 2008), the island itself is moved covertly to take scope; thus, in (71), 'the person who read what' raises to Spec,CP. A strong piece of evidence for the pied-piping analysis comes from languages where this pied-piping occurs overtly. As noted by Richards (2008) based on Cole (1982) and Hermon (1984), in Imbabura Quechua, which is a *wh*-movement language, the entire island may be moved overtly.

- (73) [Ima-ta randi-shka runa-ta-taj] riku-rka-ngui?
 what-ACC buy-NMLZ man-ACC-Q see-PST-2
 '[The man that bought what] did you see?'

This is possible also for adjunct islands, but, interestingly, not for *wh*-islands. Japanese also evidences *wh*-islands (A. Watanabe 1992). Hence Japanese parallels Imbabura Quechua in the islands that can be overcome by pied-piping: complex-NP and adjunct islands, but not *wh*-islands.

The one exception to Japanese's island insensitivity is *naze*.

- (74) *Taroo-wa [sono hon-o naze katta hito]-to hanasita no?
 Taro-TOP that book-ACC why bought person-ACC spoke Q
 Lit. 'Why did Taro speak with the person who bought that book?'
- (75) *Hanako-wa [Taroo-ga naze kaetta kara] okotta no?
 Hanako-TOP Taro-NOM why went.home because become.angry Q
 Lit. 'What did Hanako become angry because Taro went home?'

There are two possible positions for ReasonP, neither of which leads to a grammatical derivation. The ReasonP may occur inside the island. If the entire island is then pied-piped, it would mean that the entire ‘why’ clause would be in the scope position of Spec,CP. However, the whole point of the ReasonP composition is that the restriction portion, *because of x*, must be interpreted lower than Spec,CP for proper interpretation of the string. That excludes ReasonP from being pied-piped. The other possibility is that the ReasonP is located above the TP that contains the island. This would require a two-tier movement analysis. On the first movement, from inside the island to Spec,ReasonP, *naze* would incur an island violation. Note that the entire island cannot undergo this movement because the movement is to fully compose the ReasonP.

We saw that Japanese has the possibility of a two-tier movement for *naze*. Does Chinese have a similar two-tier movement option for *weishenme*? The following suggests that it does not.

Chinese (Aoun and Li 1993)

- | | |
|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| (76) a. Meigeren dou weishenme da ta?
everyone all why hit him
‘Why did everyone hit him?’ | (ambiguous: <i>every</i> > <i>wh</i> ;
<i>wh</i> > <i>every</i>) |
| b. Weishenme meigeren dou da ta?
why everyone all hit him
‘Why did everyone hit him?’ | (unambiguous: * <i>every</i> >
<i>wh</i> ; <i>wh</i> > <i>every</i>) |

Japanese

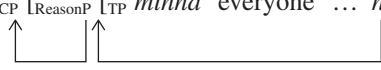
- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| (77) a. Minna-ga naze Tanaka-sensei-o
everyone-NOM why Prof. Tanaka-ACC
kiratte iru no?
hate Q
‘Why does everyone hate Professor Tanaka?’ | (unambiguous: * <i>every</i>
> <i>wh</i> ; <i>wh</i> > <i>every</i>) |
| b. Naze minna-ga Tanaka-sensei-o
why everyone-NOM Prof. Tanaka-ACC
kiratte iru no?
hate Q
‘Why does everyone hate Professor Tanaka?’ | (unambiguous: * <i>every</i>
> <i>wh</i> ; <i>wh</i> > <i>every</i>) |

In Chinese, the order ‘everyone’–‘why’ has an ambiguous reading in which not only ‘why’ can take scope over the universal quantifier, making a single-pair question, the universal may also scope over ‘why’, which results in a pair-list question. In the other order, why’–‘everyone’, only the single-pair question interpretation is possible. I have consulted with a number of Chinese speakers, and they all agree that this difference is robust. In contrast, in the

Japanese examples, regardless of word order, pair-list interpretation is impossible, or, for some speakers, quite difficult. A couple of speakers I consulted at first thought that the pair-list reading was possible with the ‘everyone’–‘why’ word order, like in Chinese, but it turns out that they were interpreting ‘everyone’ as referring to the actual people being asked—‘You all, why do you hate Prof. Tanaka?’ With this reading excluded, as in (78), these speakers also agreed that a pair-list interpretation is difficult, if not impossible.⁶

- (78) Nee, Taroo, minna-ga naze Tanaka-sensei-o kiratte iru no?
 say Taro everyone-NOM why Prof. Tanaka-ACC hate Q
 ‘Say, Taro, why does everyone hate Professor Tanaka?’

Let us see how we can account for the difference, starting with Japanese. In the ‘everyone’–*naze* order, I presume that ‘everyone’ is in the natural subject position of Spec,TP. *Naze* is base generated lower than this position, and first undergoes covert movement to Spec,ReasonP, which is above the TP and below the CP. This movement is strictly to compose the ReasonP, and not for taking scope. Scope movement occurs from Spec,ReasonP to Spec,CP.

- (79) [_{CP} [_{ReasonP} [_{TP} *minna* ‘everyone’ ... *naze* ...] ...] ...]

 scope compose ReasonP

The first movement does not leave a variable because the movement is not for taking scope. As a result, the universal *minna* does not c-command the trace of *naze*, and hence, the universal cannot take scope over *naze*. This blocks the pair-list interpretation (see Chierchia 1992–1993 among others). Compare this to the following.

- (80) Minna-ga nani-o katta no?
 everyone-NOM what-ACC bought Q
 ‘What did everyone buy?’

This has a clear pair-list question interpretation. This is because the *wh*-phrase *nani* ‘what’ undergoes movement from its surface position to Spec,CP, leaving behind a variable that is c-commanded by ‘everyone’.

In Chinese, the first question to ask is, how is the word order ‘everyone’–*weishenme* achieved? One possibility is that ‘everyone’ moves and adjoins to ReasonP. Let us suppose there. From there, *weishenme* moves once, to take scope. As a result, ‘everyone’ c-commands the variable left by *weishenme*, and pair-list interpretation becomes possible. As a result, Chinese does not have anti-intervention, as shown by the following example from Yang (2012).

- (81) *Zhiyou Zhangsan weishenme cizhi?
 only Zhangsan why^{adv} resign
 ‘Why did only Zhangsan resign?’

If Chinese also had a two-tier movement option, we would expect the pair-list interpretation to be out, just as we saw in Japanese.

4.8.1 Why Chinese Does Not Have the Two-Tier Movement of ‘Why’

Ko (2005) points out that what we are calling anti-intervention occurs in languages that have scrambling—Japanese and Korean—but not Chinese. Her account is based on external merge of ‘why’: anything that is to the left of ‘why’, including the intervenor, has been moved there, adjoining to CP. Because the intervenor has moved over CP, and ‘why’ does not need to take scope above it, there is no intervention.

- (82) INTERVENOR_i [_{CP} ‘why’ [_{TP} ... *t_i*...]]

This movement to the CP-adjoined position is scrambling, and it is only allowed in languages that have this operation. Contrary to Ko, we have seen that anti-intervention is operative even when *naze* is merged low in the structure, as low as the verb phrase. So the external-merge approach to anti-intervention does not work. Nevertheless, I will adopt the insight in Ko’s work.

A sentence can have a variety of focus domains.

- (83) John flew to Germany.

This sentence can be used to answer the following questions, each of which identifies a particular focus domain (Reinhart 1995/2006).

- (84) a. What happened? (TP)
 b. What did John do? (VP)
 c. Where did John fly to? (Goal)
 d. How did John get to Germany? (Verb)

Each of these has a correlate in a ‘why’ question, indicated by focus stress (underlined).

- (85) a. What happened? John flew to Germany (neutral focus; nuclear stress).
 b. What did John do? He flew to Germany.
 c. Where did John fly to? He flew to Germany.
 d. How did John get to Germany? He flew to Germany.

One can ask about each of these possibilities with a ‘why’ question, stressing the domain of focus as indicated above.

- (86) a. Why did John fly to Germany? (TP: no narrow focus)
 b. Why did John fly to Germany? (VP)
 c. Why did John fly to Germany? (Goal)
 d. Why did John fly to Germany? (Verb)

In addition, one can focalize the subject.

- (87) Why did John fly to Germany? (Subject)

In Japanese, the same options exist in a *naze* question using focus stress.

- (88) a. Naze John-ga Doitu-ni tonda no? (TP)
 why John-NOM Germany-to fly Q
 'Why did John fly to Germany?'
 b. Naze John-ga Doitu-ni tonda no? (VP)
 why John-NOM Germany-to fly Q
 'Why did John fly to Germany?'
 c. Naze John-ga Doitu-ni tonda no? (Goal)
 why John-NOM Germany-to fly Q
 'Why did John fly to Germany?'
 d. Naze John-ga Doitu-ni tonda no? (Verb)
 why John-NOM Germany-to fly Q
 'Why did John fly to Germany?'
 e. Naze John-ga Doitu-ni tonda no? (Subject)
 why John-NOM Germany-to fly Q
 'Why did John fly to Germany?'

Unlike in English, there is a second way to indicate these focus domains in a *naze* question, by placing *naze* in front of the focalized element. Focus stress is utilized only when there is ambiguity, as for example between VP and Goal focus domains.

- (89) a. Naze John-ga Doitu-ni tonda no? (TP)
 why John-NOM Germany-to fly Q
 'Why did John fly to Germany?'
 b. John-ga naze Doitu-ni tonda no? (VP)
 John-NOM why Germany-to fly Q
 'Why did John fly to Germany?'
 c. John-ga naze Doitu-ni tonda no? (Goal)
 John-NOM why Germany-to fly Q
 'Why did John fly to Germany?'
 d. John-ga Doitu-ni naze tonda no? (Verb)
 John-NOM Germany-to why fly Q
 'Why did John fly to Germany?'

- e. Naze John-ga Doitu-ni tonda no? (Subject)
 why John-NOM Germany-to fly Q
 ‘Why did John fly to Germany?’

Let us look at one of these cases. In (89b), *naze* is placed between the subject and the verb phrase. With no special focus stress on the non-*wh* portion of the sentence, a natural interpretation is that the speaker is asking for the reason for the VP: fly to Germany. Thus, *naze* sections the sentence into two parts in this example: topic and focus. Since Japanese is a Category I language, topic is inherited by T (except the Aboutness topic, which is universally at C, as noted in chapter 2). *Naze* here is used to mark the border between the topic and focus regions created by raising the subject to Spec,TP by topicalization. It is a function that a non-Category I language cannot resort to; such a language is solely dependent on focus stress, as we saw from the English examples. Chinese, a Category II language like English, works like English with respect to ‘why’ questions: there is no option for a two-tier movement approach because there is no discourse-configurational feature that operates at the TP level.

4.9 Use of ‘What’ for ‘Why’

In the literature on ‘why’, two types of meanings are often distinguished—cause and reason—although in some cases the two are difficult to tease apart. Tsai (2008) gives the following examples to illustrate.

- (90) a. How come the sky is blue?
 b. Why in the hell is the sky blue?
 c. Why is the sky blue?

In (a) and (b), the questioner is asking for what caused the sky to be blue, with an implication that the sky was not blue to begin with, and also accompanied by a counter-expectation that the sky somehow should not be blue. In (c), the speaker does not necessarily imply that the sky should not be blue, or that it was some other color before. The first two are asking for a cause, and the third is simply asking the reason. As Ochi (1999, 2004, 2014) notes, ‘what’ adjunct questions also have the causal implication. In addition, like with *wh-hell* questions in English, the ‘what’ adjunct question is “most natural in contexts in which emotions such as annoyance, impatience, surprise, and so forth are expressed” (2014, 404).

- (91) Was tadeln Sie Hans denn?
 what blame you Hans
 ‘Why (the hell) are you blaming Hans?’

4.9.1 'What' Adjunct Questions in Japanese

The following is an example of a 'what' adjunct question in Japanese (e.g., Kurafuji 1996, 1997; Ochi 1999, 2004, 2014; Nakao and Obata 2009). Compare it to the *naze* 'why' question with essentially the same meaning.⁷

- (92) a. Taroo-wa nani-o awatete-iru no?
 Taro-TOP what-ACC panick-ing Q
 'Why (in the hell) is Taro panicking?'
 b. Taroo-wa naze awatete-iru no?
 Taro-TOP why panick-ing Q
 'Why is Taro panicking?'

As indicated by the English translation, with the 'what' adjunct construction, the speaker is conveying something beyond just a desire to know the reason for Taro's panicking, something like disapproval or impatience, and implying that Taro should not be in this state of mind.

Another difference between *naze* and *nani* 'what' is the location of these adjunct *wh*-phrases. We have seen that *naze* is interpreted high in the structure, above the TP. As Kurafuji (1997) has noted, *nani* is located lower than negation, thus below TP. We can see this by the fact that it cannot occur with negation, an island effect.

- (93) a. Taroo-wa naze awatetei-nai no?
 Taro-TOP why panic-not Q
 'Why is Taro not panicking?'
 b. *Taroo-wa nani-o awatetei-nai no?
 Taro-TOP what-ACC panic-not Q
 'Why is Taro not panicking?'

In part based on Kurafuji's observation that *nani-o* is subject to the negative island, Ochi (2014) argues that *nani* occurs low in the structure, just above the object at V'. One question we might ask is, precisely what is the nature of this 'what', and why is it 'what' as opposed to some other *wh*-phrase? And what is the source of the "causal" meaning, as well as the "emotions such as annoyance, impatience, surprise" that Ochi has noted? Before answering these questions, there is one more point about *nani* that we should take into account. Kurafuji (1997) notes that *nani* shows anti-superiority like *naze*.

- (94) *Nani-o dare-ga awateteiru no?
 what-ACC who-NOM panicking Q
 'Who is panicking why?'

Based on our discussion of the anti-superiority of *naze*, we might expect that *nani* also has an operator-restriction structure where the restriction is separate

from the *wh*-phrase *nani*. Let us see what this operator-restriction structure could be.

As Kurafuji (1997) noted, *nani-o* is subject to inner islands such as the negative island. Recall our discussion earlier in the chapter about the complex quantifier ‘how many’ and negative islands. In inner islands such as the negative island, the inner reading (non-presuppositional) is not possible (Rizzi 1990, Beck 1995, Cresti 1995).

- (95) a. How many people do you wonder whether I should talk to?
 (*wh*-island)
 (i) For what *n*: there are *n*-many people *x*, such that you wonder whether I should talk to *x*.
 (ii) *For what *n*: you wonder whether it should be the case that there be *n*-many people that I talk to.
- b. Wieviele Hunde hat Karl nicht gefüttert? (negative island)
 how many dogs has Karl not fed
 (i) For which *n*: there are *n* dogs that Karl didn’t feed.
 (ii) *For which *n*: it is not the case that Karl fed *n* dogs.

In the example in (a), the ‘how many’ phrase has crossed a weak island, and in (b), it has crossed the negation, which is an intervenor. In both cases, the most natural interpretation is the outer reading, in which there is a presupposed group of people (a) or dogs (b) about which the question is being asked. The inner reading is difficult, if not impossible, because an intervenor occurs between the operator and its restriction. This is a typical intervention structure as characterized by Pesetsky (2000). On this account, *nani-o* must have an operator that moves to take scope, and its restriction is left lower in the structure, just as I suggested for *naze* ‘why’. Note that even if *nani-o* is scrambled above the negative island, the sentence is ungrammatical.

- (96) *Nani-o Taroo-wa awatetei-nai no?
 what-ACC Taro-TOP panic-NEG Q
 ‘Why is Taro not panicking?’

This is predicted if we assume that the restriction associated with *nani-o* is low in the structure, lower than negation. As we saw from the work of Beck, Cresti, and others, when a *wh*-phrase crosses an island, it cannot reconstruct back to its original position for scope. In (96), once *nani-o* crosses the negative inner island, it cannot be interpreted for scope in the lower position where the restriction is. As a result, the operator and its restriction cannot be interpreted as a whole, leading to ungrammaticality.

This is in sharp contrast to an argument *wh*-phrase in intervention environments, in which scrambling saves the sentence (e.g., Hoji 1985, Beck 1996a, Pesetsky 2000, Ko 2005, Miyagawa 2010).

- (97) a. *Hanako-sika nani-o yonde-i-nakat-ta no?
 Hanako-only what-ACC read-ing-NEG-PST Q
 'What did only Hanako read?'
 b. Nani-o Hanako-sika yonde-i-nakat-ta no?
 what-ACC Hanako-only read-ing-NEG-PST Q
 'What did only Hanako read?'

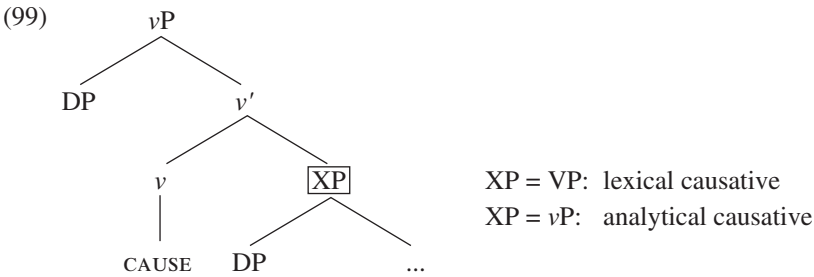
With an argument *wh*-phrase, the restriction can move up as part of the *wh*-phrase, so that in (97b), the entire *wh* operator-restriction complex is interpreted above the intervenor and it receives a proper interpretation (Beck 1996a).

To account for the negative island fact, the base position of *nani-o*—both the operator and the restriction—should be lower than negation. Ochi (2014) suggests that *nani-o* is merged at V' , just above the object and the verb. For reasons that will become clear, I will instead propose that the base position of the operator-restriction complex for *nani-o* is below negation and above vP . Let us go over the properties noted for this construction.

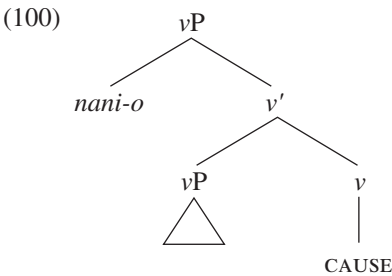
- (98) *Nani-o*
- (i) subject to inner islands;
 - (ii) subject to anti-superiority;
 - (iii) has a causal meaning;
 - (iv) implies emotions such as annoyance, impatience, and surprise.

Let us pick out one of these properties as a starting point of discussion: the observation that the *nani-o* construction has a causal meaning. How can we account for this? A straightforward account would be that there is a causative construction involved. In fact, if we make the right assumption about where the causative head and its specifier occur in the structure, we will be able to account for the other properties. As we will see, we can also account for another property not listed that is uniquely identified with the causative construction.

I propose that the *nani-o* 'why' phrase is part of a causative construction with a covert causative head. In the literature on causatives, the causative head may take a number of different projections; following Hale and Keyser (1993), I assume that the analytical causative involves the causative head taking a vP and the lexical causative is one in which the causative head takes the VP (see also Murasugi and Hashimoto 2004, Saito 2006, Miyagawa 2012b).

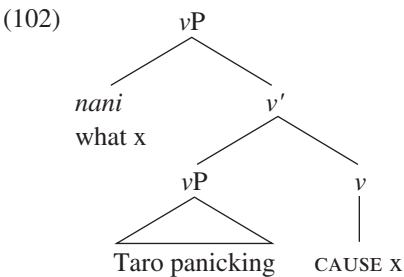


I will assume that the *nani* adjunct construction involves a structure parallel to the analytical causative, with a covert causative verb taking the vP, and *nani* in the specifier of this causative head. I assume, then, that the case marker *-o* is assigned by the covert causative head, either directly to the specifier position or to a lower position from which *nani* raises to Spec,CAUSEP. I will leave these possibilities open.



For (92a) repeated below, the meaning based on the causative analysis is “what x, cause x, Taro panicking.”

- (101) Taroo-wa nani-o awatete-iru no?
 Taroo-TOP what-ACC panick-ing Q
 ‘Why (in the hell) is Taro panicking?’



The restriction “cause x” is the causative head portion, and it stays low in the structure while *nani*, which is the operator portion, just like *naze*, raises to

Spec,CP to take scope. The occurrence of the causative head accounts for the causal meaning and also the implied emotional content behind the question. The separation of the operator from its restriction also predicts that this adjunct will trigger anti-superiority because it can never refer to a presupposed set of objects.

Along with the four properties noted above that the causative analysis can account for, there is a fifth. *Nani-o*, with the accusative *-o*, is subject to the double-*o* constraint, which disallows two instances of *-o* in the same clause (Harada 1973). There are two instances of this restriction, the “surface” double-*o* constraint, which is a mild form of the constraint, and a “deep” double-*o* constraint, which leads to complete ungrammaticality. The “surface” constraint is observed when one of the *-o* phrases is an adjunct while the latter is associated with the causative construction, in which both *-o* phrases are arguments. Ochi (2014) observes that *nani-o* is subject to the mild form of the double-*o* constraint, which is consistent with the idea that this is an adjunct. However, there is another phenomenon associated with *nani-o* that Ochi himself notices and that appears to reflect the “deep” double-*o* constraint. If true, this would make *nani-o* align with the causative construction. I will show that this is in fact the case. One important difference between our analysis and the previous ones is that *nani-o* is an argument, not an adjunct; it is the argument of the covert causative head. As I will show, this predicts that *nani-o* behaves like an argument accusative phrase relative to the double-*o* constraint.

Endo (2015) proposes for items such as *nani-o* a second ReasonP that occurs low in the structure. He also makes the point made by Ochi (2014) that this lower ReasonP involves a causal meaning, while the higher ReasonP has a “rationale” reading, which means “reason.” In many ways our analysis is similar to what Endo has proposed. However, there are two problems with his analysis, both having to do with his apparent assumption that those items that are associated with this lower ReasonP take scope at this ReasonP. The idea that a *wh*-phrase would take scope at this lower ReasonP would give it a meaning similar to an indirect question, but very clearly, *nani-o* and others in this group take scope at Spec,CP. Second, Endo gives the following as ostensibly demonstrating the “low” ReasonP scope of *nani-o* (Endo 2015, 225).

- (103) a. John-dake nani-o naiteiru no? (*John-dake* = focus)
 John-only what-ACC crying Q
 ‘Why is only John crying?’

- b. ?Nani-o John-dake naiteiru no? (*John-dake* = focus)
 what-ACC John-only crying Q
 ‘Why is only John crying?’

The grammaticality of (103a), in which *nani-o* occurs below the focus, is supposed to show that this *wh*-phrase takes scope under focus, which is lower than the “higher” ReasonP. If it is displaced into a higher position as in (103b), it is judged as marginal. The problem with this data is that, as already noted by Kurafuji (1997), *nani-o* is subject to inner islands, which indicates that it in fact is sensitive to items such as focus. In this regard, the construction Endo uses, *-dake* ‘only’, does not trigger an intervention effect. Thus, the following, with an argument *wh*-phrase, is fine.

- (104) a. Taroo-dake nani-o yonda no?
 Taro-only what-ACC read Q
 ‘What did only Taro read?’
 b. Nani-o Taroo-dake yonda no?
 what-ACC Taro-only read Q
 ‘What did only Taro read?’

As shown, the argument *wh*-phrase ‘what’ following or preceding the *-dake* phrase is grammatical. This is in sharp contrast to the examples of inner islands and other intervention examples that render *wh*-phrases, including the ‘why’ *nani-o*, ungrammatical.

In the next section, I will look at the occurrence of the case particle *-o* on *nani* in the context of the so-called double-*o* constraint. The analysis of this constraint provides further support for the analysis of *nani-o* as being part of a causative construction.

4.10 On the Double-*O* Constraint and the *Nani-o* ‘What’ Construction

The *nani-o* construction may occur with intransitive and transitive verbs (e.g., Kurafuji 1997, Ochi 2014).

- (105) Taroo-wa nani-o awatete-iru no?
 Taro-TOP what-ACC panick-ing Q
 ‘Why is Taro panicking?’
 (106) Kimi-wa Hanako-ni (?)nani-o tegami-o okutte-iru no.
 you-TOP Hanako-DAT what-ACC letter-ACC send-ing Q
 ‘Why are you sending a letter to Hanako?’

For examples such as (106), Ochi points out that the slight awkwardness has to do with the double-*o* constraint (Harada 1973), which prohibits two

occurrences of *-o* in the same clause. There are two versions of the double-*o* constraint, which we will look at below. For now let us note, as Ochi does, that if one of the *-o*-phrases is an adjunct, the double occurrence is tolerated (cf. Kuroda 1992, chapter 6). The following illustrates this.

- (107) ??Hanako-ga Taroo-o hamabe-o aruk-ase-ta.
 Hanako-NOM Taro-ACC beach-ACC walk-cause-PST
 'Hanako made Taro walk along the beach.'

As Kuroda points out, if the two occurrences of *-o* can be separated, for example, in a cleft construction, the construction becomes perfect.

- (108) Hanako-ga Taroo-o aruk-ase-ta no-wa hamabe-o da.
 Hanako-NOM Taro-ACC walk-cause-PST NMLZ-TOP beach-ACC COP
 'It's along the beach that Hanako made Taro walk.'

This is fundamentally different from the case of double *-o* in the causative construction.

- (109) Hanako-ga Taroo-ni/*-o hon-o yom-ase-ta.
 Hanako-NOM Taro-DAT/-ACC book-ACC read-cause-PST
 'Hanako made Taro read a book.'

As Kuroda and others have noted, no amount of separation saves this instance of double-*o* violation.

- (110) Hanako-ga hon-o yom-ase-ta no-wa Taroo-ni/*-o da.
 Hanako-NOM book-ACC read-cause-PST NMLZ-TOP Taro-DAT/*-ACC COP
 'It's Taro that Hanako made read a book.'

In this regard, there is something puzzling about the *nani-o* construction. While *nani-o* appears to function as an adjunct, so that it only violates the mild version of the double-*o* constraint, there is another instance in which it becomes fully ungrammatical. As Ochi (2014) has observed, in a transitive construction, the accusative object cannot scramble to the left of *nani-o* (the two question marks for (111a) are my judgment; Ochi has just one).

- (111) a. ??Kare-wa nani-o henna uta-o utat-teiru no?
 he-TOP what-ACC funny song-ACC sing-ing Q
 'Why is he singing a funny song?'
 b. *Kare-wa henna uta-o nani-o utat-teiru no?
 he-TOP funny song-ACC what-ACC sing-ing Q

This effect of scrambling only happens if the scrambled element is an accusative object. If it is, for example, a dative object, there is no problem (Ochi 2014).

- (112) Kare-wa Hanako-ni_i nani-o *t_i* atta no?
 he-TOP Hanako-DAT what-ACC met Q
 ‘Why did he meet Hanako?’

Ochi tries to account for (111b) by proposing that *nani-o* occurs at *V'*, above the object-V combination. The ungrammatical order object-*nani-o*-*V* in (111b) is ostensibly a violation of this base order. The problem with this is that objects in Japanese freely scramble to a sentence-medial position and also to the head of the sentence. Also, if the object is moved away from *nani-o*, the sentence improves, although it is still associated with the awkwardness of having two *-o*'s in one clause.

- (113) ??Henna uta-o kare-wa nani-o utat-teiru no?
 funny song-ACC he-TOP what-ACC sing-ing Q
 ‘Why is he singing a funny song?’

Below, I will propose an analysis of the double-*o* constraint that accounts for the distribution of double *-o* in the *nani-o* construction and the standard causative construction.

4.10.1 Double-*O* Constraint

The so-called double-*o* constraint (DOC) in Japanese appears in the causative construction (Harada 1973). The paradigm that demonstrates the DOC is as follows. In (114), we see that when the causative morpheme *-(s)ase* attaches to an intransitive verb stem, the external argument of the intransitive verb, which is semantically the causee of the sentence, may have the accusative *-o* or the dative *-ni*.

- (114) a. Taroo-ga kodomo-**o** tat-ase-ta.
 Taro-NOM child-ACC stand-cause-PST
 ‘Taro made the child stand up.’
 b. Taroo-ga kodomo-**ni** tat-ase-ta.
 Taro-NOM child-DAT stand-cause-PST
 ‘Taro let the child stand up.’

As indicated by the English translation, there is felt to be a difference in the meaning of these sentences: with the accusative *-o* the causation is felt to be “coercive” or “direct” while the appearance of the dative *-ni* implies “indirect” causation (e.g., Kuroda 1965, Kuno 1973, Shibatani 1973; see Miyagawa 1999 for a summary of works related to this topic). When we turn to causatives built on a transitive verb stem, the causee may only have the dative *-ni*.

- (115) a. *Taroo-ga kodomo-**o** hon-o yom-ase-ta.
 Taro-NOM child-ACC book-ACC read-cause-PST
 'Taro made the child read a book.'
- b. Taroo-ga kodomo-**ni** hon-o yom-ase-ta.
 Taro-NOM child-DAT book-ACC read-cause- PST
 'Taro made/let the child read a book.'

The ungrammaticality of (115a) is what is referred to as the double-*o* constraint (so named by Harada 1973; see also Harada 1975 for an extension; and Kuroda 1965, 1978, 1992; and Hiraiwa 2002 among many others for relevant discussion). The "direct" and "indirect" causative meanings that we saw with case alternation in (114) are found in (115b) as well, but both meanings are present without any overt marking to distinguish them, unlike in (114).

What precisely is the nature of the DOC? One proposal is that of Harada (1973), who based it on the assumption that although the causative construction begins as a biclausal structure underlyingly (Kuroda 1965), this structure is ultimately collapsed into a monoclausal one (Harada 1973, Kuno 1973), so that the causee and the object of the transitive stem end up occupying the same VP.

- (116) The double-*o* constraint (Harada 1973, 211–212)
 A derivation is marked as ill-formed if it terminates in a surface structure which contains two occurrences of NPs marked with *o* both of which are immediately dominated by the same VP-node.

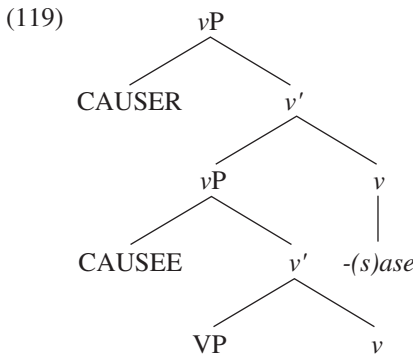
Let us again look at the causative construction. As noted earlier, if the stem to which the causative morpheme *-(s)ase* attaches is intransitive, the causee may be marked by the accusative *-o* or the dative *-ni*.

- (117) a. Taroo-ga kodomo-**o** tat-ase-ta.
 Taro-NOM child-ACC stand-cause-PST
 'Taro made the child stand up.'
- b. Taroo-ga kodomo-**ni** tat-ase-ta.
 Taro-NOM child-DAT stand-cause-PST
 'Taro let the child stand up.'

The so-called dative marking here is a postposition, as indicated by the fact that it does not allow numeral-quantifier float (Sadakane and Koizumi 1995), which is limited to DPs (Shibatani 1978).

- (118) *Taroo-ga kodomo-**ni** san-nin tat-ase-ta.
 Taro-NOM children-DAT 3-CL stand-cause-PST
 'Taro made three children stand up.'

We conclude that there are two kinds of causative morpheme *-(s)ase*, one that is associated with structural accusative Case and one that is not. For the latter, the dative marking is inserted on the causee to provide Case. As for the structure of the causative construction, we will depart from the earlier work that assumed a derivation that begins as a biclausal structure and ends up as a monoclausal one. Instead, we will adopt the suggestion in Murasugi and Hashimoto (2004) and Saito (2003) that the causative morpheme selects a *vP*. We also adopt a suggestion in Hasegawa (2004) that the causative morpheme is a kind of a “small” *v*, an idea that also is reflected in Pytkäinen’s (2002/2008) applicative-head analysis of dependent causative morphemes such as *-(s)ase* in Japanese.



If the *-(s)ase* merged here is the kind that assigns accusative Case, the causee receives *-o*, but if the other *-(s)ase* is chosen, the causee appears with the postposition *-ni*.⁸ We do not assume any sort of restructuring, a position that is consistent with Wurmbrand’s (2004) analysis of restructuring constructions in general and with the analysis of Japanese causatives in particular in Miyagawa (1999).

4.10.2 Surface DOC, Deep DOC

Harada (1975) notes that not all cases of DOC violation are created equal and that some are only a violation of a “surface constraint” (Harada 1975, 257–258), while the causative construction involves a deeper violation as well. According to Harada, the DOC as he originally formulated it in his 1973 article (see (116)) is a “surface” constraint, while there is a deeper constraint that he calls the Functional Uniqueness Principle.

(120) The Functional Uniqueness Principle (FUP)

No term of grammatical relation may be represented by more than one constituent, and conversely, no single constituent may bear more than one term of grammatical relation.

This statement of the FUP is a precursor to more recent work in the same spirit, two examples of which are Richards's (2001, 2010) Distinctness Condition on Linearization and Alexiadou and Anagnostopoulou's (2001, 2007) subject-in-situ generalization. I will continue to use the original idea and name used by Harada.

According to Harada (1975), there are constructions, such as the causative, that violate both the "deep" constraint of the FUP and the "surface" constraint of the DOC, while in other cases, only the surface DOC is violated. As an example of the latter, he gives the *tokoro* complement construction (see also Harada 1973).

- (121) Keisatu-wa sono doroboo-ga/*-o nige-yooto su-ru tokoro-o
 police-TOP that burglar-NOM/-ACC run-away try place-ACC
 tukamaeta.
 caught
 'The police arrested the burglar the moment he tried to escape.'

The occurrence of the double *-o* here leads to a DOC violation, but note that the phrases to which *-o* attaches do not share the same grammatical relation, the first *-o* phrase being the direct object while the second *-o* attaches to the entire adverbial clause headed by *tokoro*. As a result, it is possible to overcome this violation if the two instances of *-o* are put in different VPs, as in the cleft example below from Harada (1975).

- (122) Keisatu-ga sono doroboo-o tukamaeta no-wa,
 police-NOM that burglar-ACC caught NMLZ-TOP
 (soitu-ga) nige-yooto su-ru tokoro-(o) datta.
 he-NOM run away try place-ACC was
 'It was the moment he tried to escape that the police arrested the burglar.'

The two occurrences of *-o* are now separated into different VPs and the sentence is fine even if both are pronounced. In contrast, the DOC violation in the causative construction cannot be saved in this way.

- (123) Taro-ga hon-o yom-ase-ta no-wa, kodomo-ni/*-o datta.
 Taro-NOM book-ACC read-cause-PST NMLZ-TOP child-DAT/-ACC was
 'It was a child that Taro made (him/her) read a book.'

The causative construction not only violates the DOC but also the "deep" FUP because the two occurrences of *-o* are on phrases that have the same grammatical relation of "object." From our perspective, the FUP is not violated in the *tokoro* complement because the second instance of *-o* is not structural Case, given that it occurs on an adverbial phrase. This is a common usage of *-o*. Another example of this is found in Kuroda (1978).

- (124) Taroo-ga kodomo-o hamabe-o aruk-ase-ta.
 Taro-NOM child-ACC beach-ACC walk-cause-PST
 ‘Taro made the child walk along the beach.’

Although Kuroda does not provide any grammatical marking on the sentence to indicate his judgment, his description of the sentence indicates his judgment to be that the sentence is degraded. Note that the second occurrence of *-o*, which indicates “path,” is not structural Case. As Kuroda shows, the sentence becomes perfectly grammatical if one of the *-o*-marked phrases is placed in the focus position of a cleft construction.

- (125) Taroo-ga hamabe-o aruk-ase-ta no-wa kodomo-o da.
 Taro-NOM beach-ACC walk-cause-PST NMLZ-TOP child-ACC COP
 ‘It is the child that Taro made (him) walk along the beach.’

There is, then, a fundamental difference between the original DOC observed in Harada (1973) for the causative construction and the type of example in (125) where one of the *-o* phrases is not a core argument. Linguists such as Poser (1982) and Shibatani (1978) have suggested that these two types of constructions be dealt with separately, the original labeled as *deep DOC* and the latter as *surface DOC*. We believe that this is a true distinction and will assume this dichotomy. Hiraiwa (2002) argues that the DOC as originally conceived is a language-specific rule. He also argues that, despite the language specificity of the surface DOC, it is subject to the universal design of language: the double *-o* is evaluated within one phase (e.g., *vP*, *CP*). We agree with this assessment. But what is missing from Hiraiwa’s analysis is the more central phenomenon of the DOC in the causative construction—the deep DOC. As we demonstrated, the deep DOC we see in causatives is subject to the universal principle the FUP. As we have already demonstrated, the FUP operates on phases (specifically *vP*). Below I will show how the FUP also applies to the *nani-o* construction.

4.10.3 *Nani-o* and the DOC

Returning to *nani-o*, recall the distinction that Ochi (2014) observed.

- (126) a. ??Kare-wa nani-o henna uta-o utat-teiru no?
 he-TOP what-ACC funny song-ACC sing-ing Q
 ‘Why is he singing a funny song?’
 b. *Kare-wa henna uta-o nani-o utat-teiru no?
 he-TOP funny song-ACC what-ACC sing-ing Q

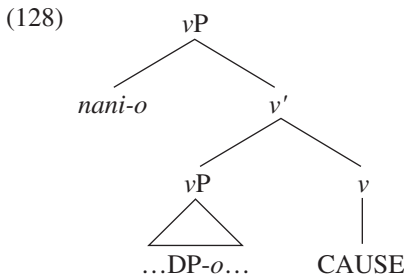
In (126a) there is a mild violation of the DOC, which is consistent with the idea that *nani-o* is an adjunct, hence the construction is subject to the surface

DOC. But the example in (126b), in which the accusative object 'funny song' has scrambled to the left of *nani-o*, indicates a violation that is more severe than the mild DOC violation. This indicates that this *nani-o* is not an adjunct; if it were, we would expect it to continue to only violate the surface DOC. Its argumenthood is predicted by the covert causative analysis I proposed. Moreover, if the object is moved further up the structure to the head of the sentence, the violation returns to the milder DOC.

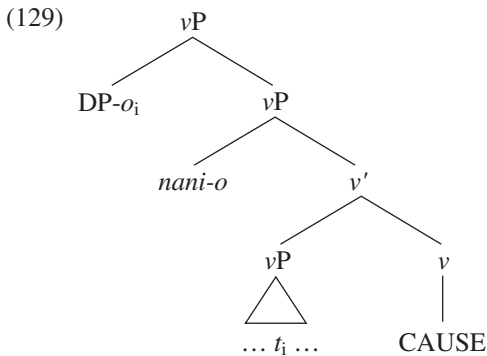
- (127) ??Henna uta-o kare-wa nani-o utat-teiru no?
 funny song-ACC he-TOP what-ACC sing-ing Q
 'Why is he singing a funny song?'

This shows that the severe DOC becomes operative only in the sentence-medial position, what I am proposing to be the *vP* headed by the covert causative head.

The structure for *nani-o* is proposed to be the following for a sentence with a transitive verb.



Note that in this structure, the two occurrences of *-o* are not in the same *vP*, hence they do not violate the deep FUP, but instead only the surface DOC. Now, suppose that the scrambling of the accusative object adjoins the object to the higher *vP*.



In this adjunction structure, the two occurrences of *-o* are now in the same ν P, assuming that adjunction makes the lower ν P a segment, not a maximal projection (May 1985). This results in a violation of the FUP, which is a more severe form of the DOC. If the accusative object moves to the head of the sentence, it is not part of the same ν P as *nani-o*, and the sentence only violates the mild DOC, as we saw earlier and repeated below.

- (130) ??Henna uta-o kare-wa nani-o utat-teiru no?
 funny song-ACC he-TOP what-ACC sing-ing Q
 ‘Why is he singing a funny song?’

4.11 Conclusion

In this chapter I applied ideas from Strong Uniformity to ‘why’ questions across languages. I began with the two analyses of ‘why’ questions: the external-merge (at Spec,CP) analysis and the movement analysis. I showed that the externally merged option is available only for languages that allow the δ -feature of focus at C (e.g., English, Portuguese). This is different from the distinction between *wh*-in-situ and *wh*-movement languages. Chinese, which is a typical *wh*-in-situ language, has an externally merged ‘why’ *zenme* which is similar to the English externally merged phrase *how come*. Chinese is a Category II language in which δ -features stay at C. In contrast, Japanese, being a Category I language, has the focus feature at T, and this prevents Japanese from having a ‘why’ that is externally merged at Spec,CP. I also proposed a structure for ‘why’ questions: it consists of an operator that binds a variable in a “because” clause. This proposal is based on the semantic work of Beck (1996b) and the syntactic work on the distribution of ‘why’ by Shlonsky and Soare (2011). It is the operator portion that is typically pronounced as ‘why’. I argued that in languages that have the δ -feature of focus at T (e.g., Japanese), there is an option to merge ‘why’ lower in the structure, and move it to the position of the operator prior to the operator moving to Spec,CP to take scope. This gives rise to anti-intervention, as observed in Japanese and Korean. Finally, I looked at the special case of ‘why’ questions expressed with ‘what’ + accusative case. This form of ‘why’ question is structurally different in that the ‘what’ occurs lower in the structure. Furthermore, it is the argument of a covert predicate of causation. As one piece of evidence for this from Japanese, I showed that we find the same effect of the double-*o* constraint with this ‘what’ as we find with the regular causative construction in Japanese.

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