

APPENDIX

SOME NOTES ON ARGUMENT-ADJUNCT ASYMMETRY

A lot of previous studies have observed argument-adjunct asymmetry as to the behavior of *wh*-phrases. The present thesis also dealt with the asymmetrical behavior in various languages.

Some cautions are necessary as to the concept ‘argument-adjunct’ asymmetry. First, as I have repeatedly mentioned thus far, what is in asymmetry is not ‘argument-adjunct’, but ‘nominal-adverbial’ *wh*-phrases. Observe the following examples:

- (1) a. *Who bought the book *why*?
b. Who bought the book *for which reason*?
- (2) a. *Who behaved *how* at the party?
b. Who came to the party *when*?

In (1), both *why* and *for which reason* stand as adjuncts of the sentence. However, the two adjuncts differ in their composition. Whereas *why* is adverbial, *for which reason* is PP, consisting of P (*for*) and DP (*which reason*). In this sense, the latter *wh*-phrase can be regarded as nominal. Therefore, the grammaticality contrast between (1a) and (1b) is attributed to the asymmetry between ‘adverbial’ and ‘nominal’ in-situ

wh-phrases.

The same point is attested in (2). Although *how* in (2a) is an argument selected by the verb, it stands as an adverbial phrase. As an adverbial, it cannot remain in situ, just as (1a). In contrast, although *when* in (2b) is an adjunct, it stands as a nominal phrase. *When* is decomposed into P (null) and DP (*when*), according to Huang (1982). Therefore, the grammaticality contrast between (2a) and (2b) again indicates that what is in asymmetry is nominal and adverbial *wh*-phrases.

The second caution is the fact that there are languages that do not exhibit argument-adjunct asymmetry. In German, for example, adverbial *wh*-phrases can appear in a multiple *wh*-question, as shown in (3) and (4):

(3) a. *Wer ist weshalb weggegangen?*

who is why gone out

‘(Lit.) Who went out why?’

b. *Weshalb ist wer weggegangen?*

why is who gone out

‘(Lit.) Why did who go out?’

(Yoshida (1999:211))

(4) a. *Wie hat sie warum das Auto repariert?*

how has she why the car fixed

b. *Warum hat sie wie das Auto repariert?*

why has she how the car fixed

(Ibid. p.245)

As sentences in (3) show, adverbial *wh*-phrases in German can cooccur with nominal *wh*-phrases. *Weshalb* ‘why’ can remain in situ ((3a)), or undergo *wh*-movement to SPEC-C ((3b)). The adverbial *wh*-phrase can even cooccur with another adverbial

wh-phrase, as (4) shows. *Warum* ‘why’ and *wie* ‘how’ cooccur in (4), and either can undergo *wh*-movement. (However, the acceptability judgment of (4) differs from person to person, according to Yoshida (1999).)

Ambar et al. (1998) assume (i) that a *wh*-phrase is composed of *wh* and its restrictor, (ii) the restrictor is morphologically realized, (iii) the strength of a restrictor is different among *wh*-phrases, and (iv) that a *wh*-phrase of a weak restrictor requires a close relation with the verb. Their argument is based on Portuguese and French. According to them, in Portuguese, the bare form of *wh*-part is *que* ‘what’, and the association of restrictive features creates other *wh*-phrases. For example, when *que* is associated with [+human], it will generate *quem* ‘whom’, and when associated with [+time], it will generate *quando* ‘when’.

In this sense, the *wh*-phrase that bears the least restrictor is *que* ‘what’. The *wh*-phrase would then behave just like adverbial *wh*-phrases observed in English. Consider the following examples:

(5) a. *O Pedro comprou *que*?

the Pedro bought what

‘What did Pedro buy?’

(Pollock et al's (1998) (4b))

b. Este bolo foi feito *com qu* ?

this pastry was made with what

‘What was this pastry made with?’

(Zubizarreta (1982:86))

(6) a. **Que* o Jo o comprou?

what the Jo o bought

‘What did Jo o buy?’

b. *Que* comprou o Jo o ?

what bought the Jo o (Pollock et al's (1998) (3c, d))

Que 'what' cannot remain in situ in the bare form, as the contrast between (5a) and (5b) shows. Moreover, even if *que* undergoes *wh*-movement, it obligatorily triggers SAI to ensure a close relation with V, as the contrast between (6a) and (6b) shows. These properties are not observed with other *wh*-phrases.

In Portuguese, an adverbial *wh*-phrase, e.g. *por que* 'why', is morphologically decomposed of *por* 'for' plus *que* 'what'. Accordingly, the adverbial *wh*-phrase behaves somewhat like nominal counterparts in English: it can remain in situ and cooccur with nominal *wh*-phrases, for example.

(7) *Quen* comprou ese livro *por que*?

who bought this book for what?

'(Lit.) Who bought this book why?'

(Marcia Kaita, p.c.)

If this line of argument is on the right track, then we can conclude as follows:

- (8) a. A *wh*-phrase of a weak restriction behaves differently from other *wh*-phrases.
- b. The restriction is morphologically realized in the internal structure of the *wh*-phrase.
- c. The strength of restriction differs from language to language.

(8a) can be paraphrased as follows with the present terminology. A *wh*-phrase of a weak restriction lacks its foc-feature. In English, adverbial *wh*-phrases such as *how* and *why* correspond to such a *wh*-phrase of a weak restriction. In Portuguese, in contrast, *que* 'what' corresponds to a *wh*-phrase of a weak restriction. Adverbial *wh*-phrases like *por que* 'why' do not correspond to it since it is composed of P (*por*)

plus DP (*que*). The language-internal and cross-linguistic difference of the strength of *wh*-restriction is detectable from the morphology of the *wh*-phrase. In Portuguese, for example, *que* ‘what’ is the most atomic element, and the other *wh*-phrases are generated by adding some restrictive element. Consequently, there is a ‘*que*-vs-others’ asymmetry in Portuguese. (The asymmetry is somewhat gradual, though. See Ambar et al. (1998) for a detailed discussion.) Lastly, since the morphological composition differs among languages, the cross-linguistic difference in morphology creates the cross-linguistic difference in syntax. For example, *por que* ‘why’ in Portuguese has an internal structure of its restriction, therefore behaves in the similar way with other nominal *wh*-phrases. In contrast, the English counterpart, *why*, does not have such an internal structure, therefore it behaves differently from other nominal *wh*-phrases.

With these conclusions, let us consider the German examples (3) and (4) again. ‘Adverbial’ *wh*-phrases in German behave in the same way with other *wh*-phrases. If the conclusions in (7) is correct, then, we can expect that the adverbial *wh*-phrases in German are not atomic elements, but are composed of P plus nominal part. According to Yoshida (1999), this is exactly the case. *Warum* ‘why’ is decomposed into *wa-r* ‘what’ and *um* ‘for’, and *weshalb* ‘why’ is also decomposed into *wes-* ‘whose’ and *halb* ‘because of’. (As for *wie* ‘how’, Yoshida assumes that it should contain a null P.) That is, ‘adverbial’ *wh*-phrases in German actually contain nominal parts, just as *for which reason* and *in which way* in English do. The only difference is that the nominal part is a bound morpheme in German.

To sum up the discussion in this appendix, ‘adverbial’ is not as plain a notion as it looks at first glance. In many languages, counterparts to *why* contain a nominal restriction part in its internal structure, hence making the apparent ‘adverbial’ *wh*-phrase behave in the similar way as other nominal *wh*-phrases. Therefore, the distinction

between nominal and adverbial *wh*-phrases must take into consideration the morphological structure as well as its meaning of the *wh*-phrase.