1. Introduction

Wh-questions like (1) have been of continual interest to researchers since Pesetsky (1987) pointed out their significance for the theory of movement:

(1)  a. Who the hell said that?
     b. What on earth do you want me to say?
     c. What the Dickens/the fuck are you talking about?
     d. Why the hell did he leave so early?

Such questions differ from normal wh-questions in a number of ways, as have been observed. First, although normal wh-phrases may stay in situ (as in multiple questions), expressions like what the hell, what the Dickens, who on earth, etc. (henceforth, wh-the-hell expressions) must always be moved to Spec, CP:

(2)  a. What did you buy for whom?
     b. Who bought what for him?

(3)  a. Who the hell saw what?
     b. *Who saw what the hell?
     c. Who the hell did you persuade to buy what?
     b. *Who did you persuade to buy what the hell?

In this respect wh-the-hell behaves a bit like adjuncts (Huang 1982):

(4)  a. How did he try to fix which car?
     b. *Who tried to fix the car how?

* We are thankful to several people for their helpful comments at the NELS Conference and afterwards, particularly Klaus Abels, Ben Bruening, Daniel Hole, Richard Larson, Miyuki Sawada, Sze-Wing Tang, and Alexander Williams.
c. Tell me why he bought what.

d. *Tell me what he bought why.

Secondly, *wh-the-hell expressions must occur as a (continuous) constituent:

\begin{enumerate}
\item*\begin{enumerate}
\item *What did he buy the hell?
\item *What are you talking about the Dickens?
\end{enumerate}
\end{enumerate}

Thirdly, the hell, the Dickens, on earth, etc., behave like polarity items in that their occurrence generally requires the presence of a wh-word:

\begin{enumerate}
\item a. *John bought the book the hell.
\item b. *They left for home the hell.
\end{enumerate}

In addition, unlike normal wh-questions, *wh-the-hell sentences are used generally when the speaker has some particular attitude about them (being impatient, annoyed, etc.). In embedded *wh-the-hell questions, the attitude may be attributed to the speaker as in (7), or to the matrix subject (the ‘internal speaker’) as in (8). The contrasts below show that sentences are ‘strange’ with predicates that are incompatible with the attitude:

\begin{enumerate}
\item a. It’s a complete mystery why the hell he left.
\item b. *It’s entirely obvious why the hell he left.
\item c. It’s entirely obvious why he left.
\end{enumerate}

\begin{enumerate}
\item a. John wonders why the hell Bill said that.
\item b. *John already knows why the hell Bill said that.
\item c. John already knows why Bill said that.
\end{enumerate}

In this paper we shall examine *wh-the-hell questions in two other languages, (Mandarin) Chinese and Japanese. It will be our goal to provide a unified account for such sentences in all three languages, despite the different syntactic properties that will be observed.

2. Chinese

2.1. Daodi

In Chinese, questions with the semantics and pragmatics of English *wh-the-hell questions are rendered by sentences illustrated below, each containing the adverb daodi, lit. ‘to the bottom’ in addition to an appropriate wh-word (see Kuo 1996 for additional examples and observations described below):

\begin{enumerate}
\item a. ta daodi mai-le shenme?
\item he daodi bought what
\end{enumerate}
‘What the hell did he buy?’

b. **daodi shei** na-zou-le nei-ben shu?
daodi who take-away-PERF that-CL book
‘Who the hell took away that book?’

c. **daodi ni yao-bu-yao** chengren zuocuo-le zhe-jian shi?
daodi you want-not-want admit do-wrong-PERF this-CL thing
‘Do you fucking want to admit that you have done this thing wrong, or not?’

d. wo jiushi bu xiaode **daodi** ta **weishenme** mei lai.
   I just not know daodi he why not come
   ‘I simply don’t know why the hell he did not show up.’

Such sentences may be direct (9a-b) or indirect questions (9c). The following observations are relevant. First, **daodi** must occur in construction with a *wh*-phrase (including an A-not-A phrase in an A-not-A question) in its c-domain. (10a) is ungrammatical because no *wh*-phrase occurs in the sentence, and (10b) because the needed *wh*-phrase is not c-commanded by **daodi**:

(10) a. *ta **daodi** zou-le.
   he daodi left-PERF

   b. *shei **daodi** xiang yao zhe-fu hua?
      who daodi think want this-CL picture

Secondly, unlike the *wh-the-hell* expressions, **daodi** and its *wh*-associate (as we shall call it) do not form a constituent. This is clear from (9a) and (9c-d). Rather, **daodi** is an adverb occurring in a preverbal or pre-IP adjunct position, while the *wh*-associate occurs in an argument position (in the case of *who, what*) or non-argument position (*why, how* or the A-not-A constituent). Thirdly, while *wh-the-hell* must occur in Spec, CP, both **daodi** and its *wh*-associate occur in situ. Fourthly, like the *wh-the-hell* questions, **daodi** questions also imply some attitude of impatience or annoyance on the part of the speaker.

(11) *?wo zao yijing zhidao [ta **daodi** lai-bu-lai] le
   I early already know he daodi come-not-come PRT
   ‘I have known for a long time whether he will fucking come or not.’

Finally, another important requirement of **daodi** is that it must occur in the scope of an interrogative CP. (12a) is ungrammatical with matrix verb ‘wonder’, because **daodi** occurs outside of the relevant embedded CP. But (12b) is well-formed with matrix verb ‘hope’, because in this case the sentence is a direct question and **daodi** is contained in the relevant matrix CP:

1 Unless **daodi** means ‘after all, eventually’.
(12) a. *ta daodi xiang-zhidao ni hui mai shenme
   he daodi wonder you will buy what
   (Intended) He wonders what the hell you will buy.

   b. ni daodi xiwang ta hui mai shenme?
      you daodi hope he will buy what
      ‘What the hell do you hope that he will buy?’

Hence, there are three elements that enter into the formation of a Chinese wh-the-hell question: a Spec of CP with [+Q], the adverbial daodi, and the wh-associate, which form a chain of successive c-command.

2.2. Daodi and Islands

Note that with respect to their positional relationship, these elements can occur locally to, or at a distance from, each other. In (9a) the three elements occur locally within the same clause. In (13) below, the wh-phrase occurs at a distance from the matrix Spec of CP. In these cases, daodi has the choice of occurring at a distance from the wh-associate (and hence locally with the matrix Spec of CP) as in (13a), or locally with the wh-associate (and hence at a distance from the relevant Spec, CP) as in (13b):

(13) a. ni daodi juede wo yinggai mai shenme?
   you daodi feel I should buy what
   ‘What the hell do you feel I should buy?’

   b. ni juede wo daodi yinggai mai shenme?
      you feel I daodi should buy what
      Same as (a)

But how far can the long-distance relationship be? Let’s consider daodi questions with island constructions. The following pair, from Kuo (1996), illustrates the effects of a weak island induced by a non-bridge verb.

(14) a. ni daodi tongyi ta mai shenme gei ni?
   you daodi agree s/he buy what for you
   ‘What the hell do you hope that s/he will buy for you?’

   b. *ni tongyi ta daodi mai shenme gei ni? (non-bridge verb)
      you agree s/he daodi buy what for you

In (14a) daodi occurs in the matrix clause and in (14b) it occurs in the weak island together with the wh-associate. As the contrast shows, the latter strategy is ungrammatical. Compared to the grammatical (13b), (14b) illustrates the effects of a non-bridge-verb island with respect to the positioning of daodi.

Similar effects are observable with wh-islands and complex NPs. (15a) has two readings, depending on which of shei ‘who’ and shenme ‘what’ is associated with daodi
Syntax of the Hell: Two Types of Dependencies

and treated as the target of the matrix question. (15b), however, is unambiguous, having only the reading according to which the wh-associate ‘what’ together with daodi has embedded scope.

(15)  a. ni daodi xiang-zhidao shei mai-le shenme? (ambiguous)
    you daodi wonder who bought what
    i. Who the hell is the x such that you wonder what x bought?
    ii. What the hell is the y such that you wonder who bought y?

    b. ni xiang-zhidao shei daodi mai-le shenme? (unambiguous)
    you wonder who daodi bought what
    i. Who is the x such that you wonder what the hell x bought?
    ii. *What the hell is the y such that you wonder who bought y?

And (16) shows that daodi cannot occur within a relative clause and have matrix interrogative scope:

(16)  a. ni daodi zui xihuan [wo piping shei de wenzhang]?
    you daodi most like [I criticize who DE article]
    Who the hell is the x such that you like the article in which I criticize x?

    b. *ni zui xihuan [wo daodi piping shei de wenzhang]?
    you most like [I daodi criticize who DE article]

We have seen that a daodi question may be grammatical with a wh-associate located within a syntactic island as long as daodi is not itself also in the island. This is true of the above examples where the wh-associate is an argument. With adjunct wh-phrases, however, the situation is different. As the following examples show, daodi questions are ill-formed with adjunct wh-associates located within an island, regardless of whether daodi is outside of the island or not:

(17)  a. *ni daodi tongyi [ta mai-bu-mai shu]?
    you daodi agree s/he buy-not-buy books
    (Intended) did you agree that he bought books, or did you agree he didn’t?

    b. *ni tongyi [ta daodi mai-bu-mai shu]?
    you agree he daodi buy-not-buy books

(18)  a. ni daodi xiang-zhidao [shei weishenme mai shu]?
    you daodi wonder who why bought books
    i. Who the hell is the person x s.t. you wonder why x bought books?
    ii. *What the hell is the reason x s.t. you wonder who bought books for x?

    b. ni xiang-zhidao [shei daodi weishenme mai shu]?
    you wonder who daodi why bought books
    i. Who the hell is the person x s.t. you wonder why x bought books?
C.-T. James Huang and Masao Ochi

ii. *What the hell is the reason x s.t. you wonder who bought books for x?

(19) a. *ni daodi zui xihuan [wo weishenme mai de shu]?
  you daodi most like [I why buy DE book
  *What the hell is the reason x such that you like the books I bought for x?

b. *ni zui xihuan [wo daodi weishenme mai de shu]?
  you most like [I daodi why buy DE book
  *What the hell is the reason x such that you like the books I bought for x?

Summarizing, a daodi question can be formed with a wh-associate in a syntactic island only if (a) daodi is itself outside of the island, and (b) the wh-associate is an argument, but not if daodi is itself inside the island or the wh-associate is an adjunct.4

3. Proposal

How do we account for the differences between Chinese and English we have observed so far, and for the island sensitivity of daodi?

First, we would like to claim that some of the Chinese-English differences with respect to wh-the-hell questions simply reflect general differences in the degree of analyticity between the two languages: Chinese is highly analytic while English is, relatively, synthetic. In wh-questions, it is generally assumed that there is a dependency between a C[+Q] and a wh-phrase, which together make up the question. In Chinese, C[+Q] and the wh-phrase are discontinuous (with the wh-phrase staying in situ), whereas in English C[+Q] and the wh-phrase are continuous: they form a phrase located in the left periphery.5 Similarly, for wh-the-hell questions:

(20) a. English wh-the-hell: continuous, synthetic, with a single phrase in Spec, CP.
  b. Chinese wh-the-hell: discontinuous, analytic, with diaodi and a wh-phrase in situ.

Secondly, the island facts associated with daodi questions can be seen as exhibiting the following pattern, with a discontinuous sequence of three elements that form two dependencies:

(21) The pattern: two dependencies

```
[CP Q [IP . . . [ISLAND . . . daodi . . . [ISLAND . . . wh-associate . . . ]]]]
```

*A B

---

4 Note that all of (17)-(19) are also ungrammatical even if daodi does not occur there. That adjuncts exhibit strong island effects is of course already well known in the literature.

5 As proposed in Tsai (1994), we might think of the wh-phrase in Comp as the synthesis of a wh-prefix with an indeterminate indefinite noun (-at, -ere, -en, for what, where, when, etc.), whereas the Chinese wh-word is the discontinuous stretch of OP[+Q] . . . shenme, etc.
where (a) Dependency A is illicit if it crosses an island and (b) Dependency B is fine crossing an island, unless the wh-associate is an adjunct. These dependencies are mediated by daodi.

Thirdly, in the wake of Cinque (1999) we propose the existence of an (interrogative) Attitude Phrase (\(\mathcal{P}\), read ‘Attitude Phrase’) in the ‘cartography’ of IP which gives rise to the special pragmatic flavor of daodi questions as noted above. In other words, the existence of this projection signals that you have “a question with an attitude”:

\[ \text{(22) The Attitude Phrase} \]

\[ \begin{array}{c}
\text{XP} \\
\text{daodi} \\
+\text{wh}
\end{array} \]

More specifically, daodi is an adverb that occupies the Spec of the \(\mathcal{P}\). The head of \(\mathcal{P}\), \(\mathcal{P}^0\), contains the logophoric feature of attitude. Daodi contains (weak) [+wh] which requires checking by some wh-phrase in its c-domain. This is done by (covertly) moving the wh-associate to \(\mathcal{P}\), adjoining it to daodi. (Dependency B) This covert movement does not exhibit island effects if it involves wh-argument associates, as usual; it does exhibit island effects if adjunct wh-associates are involved, again as usual. The interrogative CP dominating \(\mathcal{P}\) has [+Q] that needs to be checked off. This is done by covert movement of the adjoined wh-associate + daodi (or daodi+wh) into Spec, CP. (Dependency A) This covert movement will exhibit island effects (ECP or Shortest Move or whatever), as expected, because the daodi+wh phrase is an adjunct. For familiar minimality reasons, movement B must occur prior to movement A.

This mechanism derives all the relevant facts in Chinese. As for English, we claim that the relevant facts also follow, except that the movement is overt for both dependencies (the relevant +Q and +Wh features being ‘strong’). There are two possibilities in how this works. One possibility is that the hell, on earth, the Dickens, the fuck, etc., are merged as Spec of \(\mathcal{P}\), c-commanding a wh-phrase below it. Overt movement of what, etc. occurs as soon as the hell, etc. (with strong +wh) are merged. This checks the [+wh] feature of the hell, followed by overt movement to CP, when C (with strong +Q) is merged. The other possibility is to say that the entire phrases what the hell, who on earth, etc., are merged directly at positions on a par with normal wh-phrases. There is a \(\mathcal{P}\) whose empty Spec contains a strong [+wh] waiting to be checked which triggers movement. In either possibility, an adjunct constituent with a [+wh] feature is

---

\[ ^6 \text{Cf. Lasnik and Saito (1992), Kuo (1996), to which we shall return briefly below. The } \mathcal{P}\text{ is not unlike the Source/Self/Pivot phrase or Point-of-View phrase as proposed in Huang and Liu (2001) for hosting logophoric reflexives. In the typical cases, the } \mathcal{P}\text{ expresses the attitude of the speaker or the matrix subject (what Sells 1987 calls the external and internal Source).} \]
involved which, like the [+wh] adjuncts *how* and *why*, cannot stay in situ even when the Spec, CP is already filled with another *wh*-phrase:

(23)  a. What the hell did you give to whom?
b. *Who did you give what the hell to?  
c. *To whom did you give what the hell? 
d. *What did you give to who the hell?  

(24)  a. *(Tell me) why you bought what (?)  
b. *(Tell me) what you bought why (?)

How does *wh-the-hell* behave with respect to islands? The following data are representative: *What the hell* and *who the hell* appear to exhibit less severe island effects than *why the hell* and *how the hell*:

(25)  a. ?*What the hell do you wonder who bought?  
b. ?*What the hell did you meet the man who wrote? 
c. ??Who the hell did he whine that you should talk to?  
(26)  a. *Why the hell do you wonder who bought the book?  
b. *Why the hell did you meet the man who bought the book? 
c. *Why the hell did he whine that you should talk to the manager?

The difference in degree of deviance between (25) and (26) is on a par with that found between (a) and (b) below, the former a Subjacency violation and the latter an ECP/minimality violation:

(27)  a. *?What do you wonder who bought t_i?  
b. *Why_i do you wonder [who bought t_i]?

This result seems surprising in the face of our claim that the *hell* entails movement through an adjunct position, whether the *wh*-associate is itself an adjunct or not, thus inducing ECP/minimality effects on both (25) and (26). But recall that *daodi* in Chinese may occur either locally with a *wh*-associate in the same clause, or at a distance in a higher clause. We see no reason not to assume the same for English. That is, for sentences in (25), a possibility exists for LP to be merged into the matrix IP outside the islands containing the argument *wh*-phrases *who* and *what*. The requisite movement will produce only Subjacency (or CED) effects. This possibility also exists where the *hell* is

---

7 Interestingly, when an additional *wh*-phrase is added, a *wh-the-hell* phrase in situ becomes more acceptable: *Who gave what the hell to whom?* We do not offer an explanation here but simply note that there is a point of similarity to the “additional-wh” effect that has been noted since Chomsky (1981): The effect of *Tell me what you bought why* is pretty much “washed away” in *Tell me what who bought why*.

8 Lasnik and Saito (1992) treated examples like (25) as being deviant as ECP/minimality violations, but our informants largely agree that they contrast with (26) in the same way that (27a) contrasts with (27b).
associated with why or how; however, the results will still be severe as in (26) since movement of why or how alone is enough to produce ECP/minimality effects, as is well known. Thus the pattern shown in (25)-(26) is exactly as predicted.

4. Japanese

Our proposal in the previous section is crucially based on the difference in the degree of analyticity between Chinese and English. Let us examine Japanese against this background. Based on the typology of several constructions such as wh-questions and conditionals, Tsai (1994) argues that Japanese “stands in between Chinese and English” in the degree of analyticity. In this section, we show that this three way dichotomy also holds for a question with an attitude, albeit in a slightly different manner than what Tsai intended. Specifically, we argue that Japanese employs either a Chinese or an English strategy for forming the two types of dependencies in ittai questions.

(28) shows some typical examples of ittai questions (cf. Pesetsky 1987 and Lasnik and Saito 1992). Like wh-the-hell questions and daodi questions, ittai questions also imply some attitude of impatience or annoyance on the part of the speaker.

(28) a. kare-wa ittai nani-o katta no?
   he-top ittai what-acc bought Q
   ‘What the hell did you buy?’

   b. ittai kare-wa nani-o katta no?
   ittai he-top what-acc bought Q
   Same as (a)

As illustrated below, the distribution of ittai is essentially parallel to that of daodi. First, (29) shows that ittai requires the presence of a wh-phrase in its c-domain (cf. (10)). Second, ittai must be in the scope of an interrogative CP, as shown in (30) (cf. (12)).

(29) a. *kare-wa ittai hon-o katta.
   he-top ittai book-acc bought

   b. *kare-wa naze ittai kita no?
   he-top why ittai came Q

(30) a. kare-wa Hanako-ga ittai nani-o katta ka sira-nai.
   he-top Hanako-nom ittai what-acc bought Q know-neg
   ‘He does not know what the hell Hanako bought.’

   b. *ittai kare-wa Hanako-ga nani-o katta ka sira-nai.
   ittai he-top Hanako-nom what-acc bought Q know-neg

Discussion of the island sensitivity of ittai can be kept brief, as it mirrors that of daodi. In principle, ittai and a wh-associate can occur at a distance:
C.-T. James Huang and Masao Ochi

(31) a. ittai Taro-wa Hanako-ga kimi-ni nani-o okutta to omotta no? ittai Taro-top Hanako-nom you-dat what-acc sent that thought Q ‘What the hell did Taro think that Hanako sent to you?’

b. Taro-wa Hanako-ga ittai kimi-ni nani-o okutta to omotta no? Taro-top Hanako-nom ittai you-dat what-acc sent that thought Q

Note that (31b) also shows that ittai (as well as its wh-associate) may occur in situ.

When the wh-associate is an argument and occurs within an island, relevant examples are fine if ittai is outside an island (e.g., 32). When the wh-associate is an adjunct within an island, sentences are bad regardless of where ittai is located as in (33):

(32) a. ittai kimi-wa [Hanako-ga dare-ni ageta hon]-o yonda no? ittai you-top Hanako-nom who-dat gave book-acc read Q Who the hell is the x s.t. you read the book that Hanko gave to x?

b. *kimi-wa [Hanako-ga ittai dare-ni ageta hon]-o yonda no? you-top Hanako-nom ittai who-dat gave book-acc read Q Same as (a)

(33) a. *ittai kimi-wa [Hanako-ga naze kaita hon]-o yonda no? ittai you-top Hanako-nom why wrote book-acc read Q What the hell is the reason x s.t. you read the book that Hanko wrote for x?

b. *kimi-wa [Hanako-ga ittai naze kaita hon]-o yonda no? you-top Hanako-nom ittai why wrote book-acc read Q Same as (a)

Parallelism between daodi and ittai goes even further. Yanagida (1996) argues that ittai occurs higher than VP adverbs such as yoku ‘often’ as shown below. Following Yanagida, we can interpret this fact as indicating that ittai must appear higher than VP.

(34) a. kare-wa ittai yoku nani-o kau no? he-top ittai often what-acc buy Q ‘What the hell does he often buy?’

b. *kare-wa yoku ittai nani-o kau no? he-top often ittai what-acc buy Q

Let us now examine the manners in which the two types of dependencies are formed in ittai questions. We already saw that ittai and its wh-associate need not form a constituent on the surface (e.g., 28b). We assume that the latter moves covertly to the former in such cases. When ittai and a wh-associate are adjacent, as in (28a), we would like to argue that they may form a constituent in either overt syntax or covert syntax. Cleft examples such as (35) confirm the idea that that ittai + wh-associate may be together in overt syntax.
kimi-ga yonda no wa [Chomsky-no ittai nani-ni tuite-no hon] desu ka?
you-nom read C top Chomsky-gen ittai what-dat about-gen book be Q
‘(lit.) About what the hell book of Chomsky’s is it that you read?’

Once we have established that Japanese forms Dependency B in a manner analogous to Chinese or English, it is easy to demonstrate that the same point applies to the formation of Dependency A in this language. The fact that ittai and the wh-associate may occur in situ (e.g., 31b) immediately suggests that Dependency A may be formed covertly in this language. Furthermore, consider examples such as the following, in which ittai + wh-associate has undergone long-distance scrambling.

[Chomsky-no ittai nani-ni tuite-no hon-o] Taro-wa kimi-ga
Chomsky-gen ittai what-dat about-gen book-acc Taro-top you-nom

kattta ka tazuneta no?
bought Q asked Q
‘About what the hell book of Chomsky’s did Taro ask whether you bought?’

Takahashi (1993) argues that (long-distance) scrambling of a wh-element into a clause headed by Q counts as overt wh-movement in Japanese. Given his analysis, nothing excludes the possibility that the fronted constituent in the above example undergoes wh-movement in overt syntax.

Summarizing, we have shown that Japanese forms the two types of dependencies either overtly or covertly, thus standing in between Chinese and English.

5. Further Issues

5.1 More on Dependency B

An alternative analysis, which dispenses with Dependency B, has been briefly considered by Lasnik and Saito (1992) and explored at some length by Kuo (1996). According to this view, elements like daodi and ittai move to the spec of interrogative CP independently of the wh-associate. This alternative analysis also captures the locality effects examined so far. Take (14b) as an example. The alternative analysis would attribute its badness to the movement of the adjunct daodi out of an island.

We would like to provide two arguments in favor of positing Dependency B. First, recall that both daodi/ittai and the wh-associate must be in the c-domain of the interrogative CP. Recall also that there is an additional requirement: daodi/ittai must c-command the wh-associate, not vice versa (see (10b) and (29b)). Under the alternative approach introduced above, it is unclear why there is such an asymmetry between the two elements. Our analysis provides a simple explanation for this fact. As discussed earlier, elements like daodi and ittai require the presence of a wh-phrase, but the latter does not require the presence of the former (i.e., ordinary wh-questions without the hell/daodi/ittai). We could interpret this fact as showing that it is the requirement of
daodi/ittai that motivates Dependency B. Given the recent target-based view of movement (Attract or Agree), it is natural that daodi/ittai must occur higher than the wh-associate.

Second, languages like Japanese are known to possess a certain class of elements triggering intervention effects. For example, the sika phrase (which, together with negation, means ‘only’) in Japanese cannot intervene between Q and a wh-phrase:

(37) a. ?*Taro-sika nani-o tyuumon-shi-na-katta no?
    Taro-only what-acc order-do-neg-past Q
    What is the thing x s.t. only Taro ordered x

b. nani-o Taro-sika tyuumon-shi-na-katta no?
    what-acc Taro-only order-do-neg-past Q

As Miyagawa (1999) and Watanabe (2000) have claimed, naze ‘why’ is, for some reason, exceptional in this respect.9

(38) a. kimi-wa piza-sika naze tyuumon-shi-na-katta no?
    you-top pizza-sika why order-do-neg-past Q
    ‘Why did you order only pizza?’

b. kimi-wa naze piza-sika tyuumon-shi-na-katta no?
    you-top why pizza-sika order-do-neg-past Q
    Same as (a)

Now, ungrammaticality of (39b) is of great interest. In this example, the sika phrase is located between ittai and a wh-associate. This fact immediately follows if there is a dependency between them (Dependency B).

(39) a. kimi-wa piza-sika ittai naze tyuumon-shi-nak-atta no?
    you-top pizza-sika ittai why order-do-neg-past Q
    ‘Why the hell did you order only pizza?’

b. *kimi-wa ittai piza-sika naze tyuumon-shi-nak-atta no?
    you-top ittai pizza-sika why order-do-neg-past Q
    Same as (a)

5.2. D-linking and Movement

Finally, let us touch on Pesetsky (1987), who claims to the effect that non-D-linked phrases force movement, exhibiting island sensitivity, while D-linked phrases do not

---

9 One possibility is that naze, being an adjunct, can be base-generated in the spec of CP (see Aoun and Li (1993) and Rizzi (1990)): In that case, the dependency between Q and naze is trivially established. It is then crucial for our discussion that such a derivation be unavailable for (39b) to be discussed below. Several possibilities come to mind but we cannot discuss them here due to lack of space.
Syntax of the Hell: Two Types of Dependencies

...move, hence no LF island effects. *Wh-the-hell*, being “aggressively non-D-linked”, must move. This is why the hell is incompatible with which-phrase (e.g., 40a). But notice that daodi and ittai are fully acceptable in ‘which’-questions, as shown below:

(40)  a. *Which the hell* book does he want to read?

     b. ta daodi yao kan na yi ben shu?
        he daodi want see which one CL book
        ‘Which the hell book does he want to read?’

     c. kimi-wa ittai dono hon-o yomi-tai no?
        you-top ittai which book-acc read-want Q
        ‘Which the hell book do you want to read?’

There is another difference between the hell and daodi/ittai. While the hell cannot occur with whether, daodi and ittai are fine in A-not-A questions and yes-no questions, respectively:

(41)  a. *I wonder whether the hell* you want to buy this book or not.

     b. ni daodi mai-bu-mai shu (ne)?
        you daodi buy-not-buy book (Q)
        ‘Will you buy books or not?’

     c. kimi-wa ittai sono hon-o katta no? (kaw-anak-atta no?)
        you-top ittai that book-acc bought Q buy-not-past Q
        ‘Did you buy that book or not?’

It is quite possible that which-questions and yes-no/A-not-A questions fall into the same category in terms of D-linking properties, in the sense that they both assume the existence of set(s) from which felicitous answers are drawn.

Our point goes as follows. While the hell signals non-D-linking, daodi and ittai are fully compatible with D-linked elements. Hence, daodi and ittai are not the complete equivalents of the hell after all. However, regardless of whether they are D-linked or not, all of them (daodi ...wh, ittai ...wh, and wh-the-hell) (a) involve some logophoric attitude, and (b) exhibit island effects. This suggests that the driving force of movement may not be non-D-linking per se, but the existence of a movement-triggering adjunct position (viz. the attitude phrase). It also may not be the non-

---

10 Being aware of the Japanese fact, Pesetsky indeed offers the speculation that dono ‘which’ is not inherently D-linked. According to his view, examples like (40c) are grammatical only on the non-D-linked reading. But this is untenable, since ittai + dono is perfectly fine in a clear D-linked context.

(i) Taro to Jiro to Hiroshi no uti, kimi-wa ittai dono hito-ga suki-na no?
    Taro and Jiro and Hiroshi gen among you-nom ittai which man-nom fond-be Q
    ‘(lit.) Among Taro, Jiro, and Hiroshi, which the hell man do you like most?’
referential nature of a *wh*-word per se. Everything moves, but if it has to move through that adjunct position, then island properties ensue.

In fact, there are expressions closer to *what the hell* in Mandarin such as *shenme mingtang* ‘what name and title’ and *shenme gui* ‘what ghost’ and also in Taiwanese such as *shimi waNko* ‘what bowl-and-pot’.

(42) a. nimen zai tanlun shenme mingtang ya? (*na yige mingtangi*) 
you at discuss what name-&-title PRT which one name-&-title
‘What the hell are you guys discussing?’

b. li ti kong shimi waNko? goa long thiaN bo. (*tuei chite waNko*)
you at say what bowl-&-pot I all hear not which one bowl-&-pot
‘What on earth are you talking about? I can’t figure out a thing?’

These expressions cannot occur with ‘which’: *na yige mingtang* ‘which name and title’, *na yige gui* ‘which ghost’, *tuei chite waNko* ‘which bowl-and-pot.’ Note also that *daodi* can co-occur with those ‘the hell’ expressions:

(43) a. ni daodi zai gao shenme gui? (Mandarin)
You daodi at do what ghost
‘What the hell are you up to?’

b. li taote ti kong shimi waNko? (Taiwanese)
You daodi at say what bowl-and-pot
‘What the hell are you talking about?’

German facts are noteworthy in this context. Wiltschko (1997) analyzes *wh + zum Teufel* ‘wh + to the devil’ as a non-D-linked *wh*-phrase, but this language also has the adverbial element *eigentlich* (Daniel Hole (p.c.)), which we think corresponds more closely to *daodi/ittai*. As shown below, *wh + zum Teufel* and *eigentlich* can co-occur.11

(44) **Wer zum Teufel** hat das *eigentlich* gemacht?
who to.the devil has that eigentlich done
‘And, who on earth did that?’

6. Conclusion

Our goal in this paper has been to provide a unified analysis of a *wh*-question with an attitude in English, Chinese, and Japanese. In doing so, we provided strong empirical evidence for positing two kinds of dependencies in this type of *wh*-question. Different languages form such dependencies at different points in the derivation, from which the apparent asymmetry in the extraction pattern between English vs. Chinese/Japanese follows straightforwardly. Finally, in connection with Pesetsky’s (1987) view of

11 As expected, *eigentlich* is perfectly fine in ‘which’-questions (thanks to Klaus Abels (p.c.) for the information), just like *daodi* and *ittai*.
movement, we have shown that daodi/ittai are not the complete equivalents of the hell and that it is not non-D-linking per se, but the existence of an Attitude Phrase that makes movement obligatory.

References

Miyagawa, Shigeru. 1999. Reconstruction and ECP effects. Ms., MIT.

(Huang) Department of Linguistics Harvard University 305 Boylston Hall Cambridge, MA 02138 ctjhuang@fas.harvard.edu

(Ochi) Faculty of Language and Culture Osaka University 1-8 Machikaneyama Toyonaka, Osaka 560-0043 Japan ochi@lang.osaka-u.ac.jp