

THE ACQUISITION OF ENGLISH MULTIPLE INTERROGATIVES BY INDONESIAN SPEAKERS

Eri Kurniawan

Indonesia University of Education

email: eri-kurniawan@uiowa.edu

Abstract: This paper investigates the acquisition of English multiple interrogatives such as *Who did what?* by advanced learners of English whose first language is Indonesian. The underlying functional feature of multiple interrogatives is multiple focus features, which are not available in Indonesian. Unlike English, there is no equivalent structure of multiple interrogatives in Indonesian since *wh*-questions in this language are instantiations of unique focus constructions. Acceptability judgment tasks were administered on four *wh*-pairings: *who-when*, *who-where*, *what-when*, and *what-where*. The first task was in the form of questions with a pair-list answer and single answer, whereas the second was in the form of questions within the contexts. Conjoined interrogatives were also added into the tasks in order to observe the L1 transfer. The results clearly demonstrate that overall advanced learners of English were significantly different from the English native speakers in their ratings of acceptability of multiple interrogatives. However, the statistical data of each *wh*-phrase pairing demonstrates that L2 learners performed like native controls in their ratings of most of the pairings. These findings suggest that the present study lends partial support to Full Transfer/Full Access Hypothesis and No Parameter Resetting Hypothesis.

Keywords: multiple interrogatives, multiple focus features, acceptability judgment tasks

Abstrak: Makalah ini menyelidiki perolehan kalimat tanya bertingkat seperti *siapa yang melakukan apa* oleh para pembelajar bahasa Inggris tingkat mahir yang bahasa ibunya bahasa Indonesia. Fitur fungsional penting dari kalimat tanya bertingkat adalah fitur fokus bertingkat, yang tidak ada dalam bahasa Indonesia. Tidak seperti bahasa Inggris, tidak ada struktur yang sama untuk kalimat tanya bertingkat dalam bahasa Indonesia karena pertanyaan dari “*wh*” dalam bahasa ini adalah instansiasi dari konstruksi fokus yang unik. Tugas penilaian keberterimaan dilaksanakan dalam empat pemasangan kata tanya “*wh*”: “*who-when*” (siapa-kapan), “*who-where*” (siapa-di mana), “*what-when*” (apa-kapan), dan “*what-where*” (apa-di mana). Tugas utama dalam bentuk pertanyaan dengan jawaban sepasang dan jawaban tunggal, sementara yang ke dua dalam bentuk pertanyaan dalam konteks. Kalimat tanya gabungan juga ditambahkan ke dalam tugas-tugas tersebut untuk mengamati peralihan bahasa sumber. Hasilnya jelas menunjukkan bahwa secara keseluruhan pembelajar bahasa Inggris mahir secara signifikan berbeda dengan penutur asli bahasa Inggris dalam penilaian mereka terhadap keberterimaan kalimat tanya bertingkat. Akan tetapi, data statistik dari tiap pasangan frase “*wh*” menunjukkan bahwa pembelajar bahasa asing melakukan penilaian di hampir semua pasangan seperti layaknya penutur asing. Temuan-temuan ini menunjukkan bahwa kajian ini mendukung Hipotesis Peralihan Penuh/Akses Penuh dan Hipotesis “No Parameter Resetting.”

Kata kunci: kalimat tanya bertingkat, fitur fokus bertingkat, tugas penilaian keberterimaan,

The nature of L1 transfer to L2 grammars and Universal Grammar access at L2 grammars is one of the intriguing issues in generative second language acquisition, about which several hypotheses have been proposed. Two of them became the concern of the present study, namely Full Transfer/Full Access (Schwartz & Sprouse 1994, 1996), which contends that parameters can be reset to account for the new values in the L2, and No Parameter Resetting Hypothesis, which argues that parameters cannot be reset if they differ from those in the L1 (Hawkin 1998; Hawkins and Chan 1997).

The present paper shall present empirical evidence which will argue for or against one of the two hypotheses. In particular, it investigates the acquisition of multiple interrogatives in the interlanguage grammar of Indonesian-speaking learners of English, which implicates the acquisition of multiple focus features. Multiple interrogatives are common cross-linguistically, yet there are some languages that do not have a feature to allow them to build such constructions. One of these is Indonesian (or Bahasa Indonesia). Hence, in the context of second language acquisition, it is interesting to ascertain whether multiple interrogatives are acquirable by Indonesian learners of English.

The paper will be organized as follows. Section II will offer some theoretical frameworks about multiple interrogatives in English by outlining the fact that such constructions are possible in English due to the presence of multiple focus features at Logical Form (LF). This feature is not available in Indonesian due to the fact that Indonesian wh-questions are instances of unique focus constructions. Section III will describe some consideration of the issue at hand in light of the two hypotheses. Section IV will lay out the research question and the prediction made by each of the hypotheses: FTFA and NPRH. Section V will delineate the type of experiment, participants, test materials, procedures and results. Section VI will provide some discussion of the findings, and section VII will wind up the findings and discussion.

The interaction between wh-questions and focus structure has been widely elaborated by a number of syntacticians (Rochemont 1978, 1986; Culicover & Rochemont 1983; Horvath 1981, 1986; Kiss 1987 cited in Suranyi 2004). Wh-phrases in single questions are assumed as a sub-case of focus, an assumption that is evidenced by a variety of prosodic and semantic parallelisms, as well as syntactic similarities. With regard to structural descriptions, syntactic focusing which is represented by FocP (Brody 1990; Rizzi 1997 cited in Suranyi 2004) is commonly assumed to be the target of the same syntactic projection of moved wh-phrases.

Horvath (1986 cited in Stoyanova 2008) assumes a universal principle according to which focus is a syntactic feature that is assigned to a non-echo wh-phrase. Wh-movement is then assumed to occur for focusing reasons.

Given the above account, Calabrese (1984 cited in Stoyanova 2008) relates the fact that Italian disallows multiple interrogatives to the fact that it is not possible to have more than one focus of new information in the same sentence. Along the same line, Rizzi (1997) argues that wh-phrases and focused elements in Italian display the same syntactic properties. They are licensed in the same structural position of the left periphery and therefore have a complementary distribution. Rizzi further argues for a unique focus position in the left periphery of Italian to account for the fact that the language does not allow multiple interrogatives and multiple focuses.

In an attempt to examine specific internal properties of languages that do not exhibit multiple interrogatives, Stoyanova (2008) proposes the Uniqueness Hypothesis which states that

Languages that license wh-phrases only in a unique structural focus positions are languages without multiple wh-questions. The notion of uniqueness has to be understood as the interaction of the following parameters: 1) no focus in-situ, 2) no multiple specifiers of a FocP or alternatively no clustering of focused

constituents, and 3) no FocP-recursion.

Stoyanova (2008) hypothesizes that wh-phrases in languages that do not admit multiple wh-questions have an uninterpretable strong focus feature that should be checked off by a wh-phrase. Assuming that in such languages focus is realized in a unique structural focus position, multiple wh-questions cannot be licensed.

For the purpose of the present study, the Uniqueness Hypothesis was assumed by discarding the first parameter. The reason is that such a parameter fails to explain the absence of multiple interrogatives in Indonesian languages, which apparently allow in-situ focus. I will explore this issue in sub-section 3.

Multiple Interrogatives in English

English, like many other languages, countenances multiple interrogatives such as the following.

(1) Who did what?

In (1) while one wh-phrase, i.e. “what”, stays in the base position, the other wh-phrase, i.e. who, is extracted from the specifier of TP to the specifier of CP. In other words, multiple interrogatives in English require the presence of one wh-phrase in clause-initial SpecCP position. A simplified representation of (1) is given in (2).

(2) [_{CP}[_{C'} Who_i]_i] [_{TP} <who>]_i [_{VP} <who> did what]]

In (2) ‘who’ is generated from the specifier of vP as the subject of the verb ‘did’. It then moves up to the specifier of TP to satisfy a strong uninterpretable feature of EPP (Extended Projection Principle) on T’ that requires something nominal be attached to. ‘Who’ ends up on the specifier of CP to check off a strong uninterpretable [uw^{*}] feature on C’.

According to Pesetsky (1987), a felicitous answer to (1) involves a set of ordered pair of people and things done, such as, *Ahmad bought the groceries; Hasan cooked lunch*; etc. This pair-list answer is indicative that “what” is paired with “who” at Logical Form

(LF), a syntax-semantic interface. This is essentially a proposal from Chomsky (1976) and has been advanced by Kayne (1979), Jaeggli (1980a, 1982), Aoun, Hornstein, and Sportiche (1981), Huang (1981), and others (cited in Pesetsky 1987). In this proposal, wh-in-situ, namely ‘what’ in (1), undergoes a covert movement at LF. This way, ‘what’ can also take scope over the entire clause. This Chomsky’s analysis is represented in (3).

(3) [_{Comp} what_i who_i] e_i did e_j]]

Hagstrom (1998 cited in Grebenyova 2006) attempts to account for this pair-list reading by proposing that wh-interrogatives with the pair-list reading denote a set of questions. Hence, the multiple interrogatives in (3) have the meaning of a set of questions, where each question is asking about the object done by each individual from the set of individuals denoted by the higher wh-phrase *who*. If the domains of individuals denoted by *who* contained two individuals, namely Ahmad and Hasan, there would be two questions in the set as in (4).

(4) What did Ahmad do and what did Hasan do?

The sentence in (4) becomes the representation of the multiple interrogatives in (3), which should be felicitously responded by a pair-list answer as in (5).

(5) Ahmad bought the groceries and Hasan cooked lunch.

The same idea is addressed by Krifka (2001 cited in Grebenyova 2006) who treats the pair-list reading of multiple interrogatives as a series of conjoined interrogatives, where each question is a separate speech act.

Interrogatives in Indonesian

Indonesian language is blessed with numerous ways of asking a question. There are three types of wh-questions as mentioned in Saddy (1991) and Cole & Hermon (1998): wh moved to its scopal position as in (6), partially moved wh in (7) and wh-in-situ (8).

- (6) Siapa yang akan presentasi minggu ini?
 who that will present week this
 'Who will present this week?'
 (7) Kamu fikir kenapa Eri pergi ke Amerika.
 you think why Eri go to America
 Why do you think Eri went to America.
 (8) Eri akan presentasi apa?
 Eri will present what
 'What will Eri present?'
 (9) Siapa presenter minggu ini?
 who presenter week this
 'Who will be the presenter this week?'

The distribution of the complementizer *yang* within the wh-questions appears to be contradictory. It is obligatory in verbal sentences such as (6) but barred in nominal sentences such as (9). As a matter of fact, this is not a contradiction at all as argued by Cole, Hermon & Tjung (2005). They claim that the solution to this seemingly contradictory restriction should be built upon three crucial claims: (a) in Standard Indonesian there is a requirement of parallelism between syntactic structure and information structure; (b) although the *yang* sentence like (6) appears to be a verbal sentence, a closer examination reveals that it is, in fact, a nominal sentence; and (c) the grammaticality of the sentences (6) is due to a general rule that optionally moves focused predicates to initial position, and such sentences are not instances of either wh-movement or of wh-in-situ subject position.

Cole, Hermon & Norhaida (2000) contend that the sentence (6) is, in fact, a nominal sentence, following Mashudi (1976) on Headless Relative Clause Hypothesis (HRCH). According to HRCH, *yang* questions consist of two NPs rather than one NP and one VP. *Yang* is not a main clause complementizer; instead it is the complementizer that introduces a headless relative clause. In (6) the two NPs, a headless relative clause and the wh-phrase *siapa* (who), are related in the structure, as in (10). The structure is claimed to correspond to the nominal sentence structure, as in (11).

- (10) [[_{NP}Siapa] [_{NP}yang akan presentasi minggu ini]]?
 (11) [[_{NP}Bill] [_{NP}dosen saya]]?
 Bill lecturer I

'Bill is my lecturer'.

We see that in (10) the NPs are a wh-phrase and a headless relative clause, while in (11) both NPs are nouns. Each of the structures illustrated in (10-11) conforms to the Parallelism Hypothesis (Soemarmo 1970), according to which the focus or new information must occur in the predicate and the subject must be the old information (topic).

While the subject in Indonesian should only be occupied by a topic, the predicate should be occupied by a focus. The question is now, what is the status of the first NPs in (10-11) repeated below in (12-13)?

- (12) [[_{NP1}Siapa] [_{NP2}yang akan presentasi minggu ini]]?

- (13) [[_{NP1}Bill] [_{NP2}dosen saya]]

The answer is that the first NPs in (12-13) are topic elements that get focalized. Notice that the following structures (14-15) relatively mirror (12-13). In conformity to Parallelism Hypothesis, in (14-15) the first NPs are topic and the second ones are focus.

- (14) [[_{NP1}yang akan presentasi minggu ini] [_{NP2}Siapa]]?

- (15) [[_{NP1}dosen saya] [_{NP2}Bill]].

The sentences (14-15) do not contravene the Parallelism Hypothesis since there is an independently motivated process of predicate fronting, which moves a focused marked-constituent from the predicate to a sentence initial position (Cole, Hermon & Tjung 2005).

We now find empirical evidence that wh-construction in Indonesian is markedly different from that of English such that it is an instance of a unique focus construction (in spirit identical to the proposal of Cheng 1991; Martohardjono 1993; Cole & Hermon 2000; Cole, Hermon & Tjung 2005), where the wh-phrase is base-generated in the matrix clause and *yang* is the relativizer of a headless relative clause. *Siapa* and *Bill* move up from the focus position to the sentence initial position because there is a strong focus feature that requires locality of feature checking.

A major question that begs an answer is what prohibits multiple interrogatives from occurring in Indonesian. This is definitely an empirical question that necessitates an

investigation for an answer. Very unfortunately, though, until recently this issue has escaped from any linguistic investigation, entailing that the question has been left unanswered.

One probable answer is that the structural focus position in Indonesian is unique in the sense that it is impossible to build a clause with multiple focus positions or multiple wh-questions. This, in spirit, concurs with Stoyanova's Uniqueness Hypothesis. Let's observe the following sentences.

(16) **Siapa yang akan presentasi apa minggu ini?*

who that will present what week this

'Who is presenting what this week?'

(17) **Yang akan presentasi apa siapa minggu ini?*

that will present what who week this

'Who is presenting what this week?'

The ungrammaticality of (16) and (17) is attributed to the fact that there is more than one wh-phrase in a clause. Recall that wh-phrases in Indonesian occupy a focus position in light of information structure, which manifests in its syntactic structure. Hence, the unavailability of multiple wh-phrases in the language parallels to the unavailability of multiple focus features.

Considerations for SLA

Although multiple interrogatives have received copious attention in the linguistic literature (among others Cheng 1991; Dayal 2002, 2005), only a few studies have investigated this phenomenon in the context of second language acquisition, thus little is known as to how L2 learners of English whose L1 does not instantiate such constructions cope with it.

Among the few studies, Bley-Vroman & Yoshinaga (2000), for instance, report that high proficient Japanese learners of English rated the acceptability of multiple interrogatives in English significantly different from native speakers of English. In the same vein, Hawkins & Hattori (2006) reveal that Japanese speakers were significantly different from the English native speakers in their acceptance

of grammaticality and ungrammaticality of multiple interrogatives. They argue that Japanese do not have the uninterpretable wh-feature since it was not selected from UG inventory during the critical period.

The two studies (Bley-Vroman & Yoshinaga 2000 and Hawkins & Hattori 2006) clearly favor No Parameter Resetting Hypothesis, according to which the L2 grammar is assumed to have recourse only to those parameters instantiated in the L1. Subsequent resetting of parameters to admit new values in the L2 is deemed impossible. In other words, new features that are not realized in the L1 are claimed to be unattainable by the L2 learners (White 2007).

In contrast to NPRH, Full Transfer/Full Access Hypothesis maintains that there will be subsequent restructuring or resetting of parameters in response to properties of the L2 input (Schwartz & Sprouse 1994, 1996 cited in White 2007). According to this hypothesis, the L2 learners can acquire new functional categories or features which differ from those found in the L1.

The present study investigates the parametric variation between Indonesian and English in multiple interrogatives. The underlying feature that allows English to build multiple interrogatives is multiple focus features at LF, which are not available in Indonesian. At S-Structure, the two languages basically have the same focus feature, but Indonesian does not allow the focus feature to recur at LF. This may explain why multiple interrogatives are not exemplified in Indonesian.

Given the fact that the L2 learners are adult learners, who had passed the critical period when they started learning English, the investigation of this property is interesting in the context of second language acquisition research. It determines which of the two hypotheses can best account for the phenomena under investigation.

Hypotheses and Predictions

The purpose of the present study is to investigate whether Indonesian-speaking

learners of English who are considered to have advanced proficiency of English can acquire multiple focus features in English such that they accept multiple interrogatives in English. Conjoined interrogatives were also incorporated into this study to ascertain whether transfer effects obtain. The properties being investigated are presented in Table 1.

Table 1. Summary of properties

	Multiple Interrogatives	Conjoined Interrogatives
Indonesian	✗	✓
English	✓	✓

Whereas the two contesting hypotheses, namely Full Transfer/Full Access Hypothesis (FTFAH) and No Parameter Resetting Hypothesis (NPRH), are in agreement that the L2 learners will initially transfer the values of their L1 to their L2 grammar, they have two opposing predictions concerning the subsequent development. FTFAH predicts that the L2 learners will accept multiple interrogatives in English, indicating that they can acquire multiple focus features, NPRH predicts the opposite. The L2 learners, according to NPRH, will reject multiple interrogatives, suggesting that they cannot acquire multiple focus features since they are not realized in their L1.

Table 2. Summary of predictions

	Multiple Interrogatives	Conjoined Interrogatives
FTFA	Accepted by L2 learners and native controls	Accepted by L2 learners and native controls
NPR	Rejected by L2 learners but accepted by native controls	Accepted by L2 learners and native controls

THE STUDY

First Experiment

Participants

Two groups participated in this study: five Indonesian-speaking learners of English and six native speakers of American English. The L2 learners consisted of 1 undergraduate student and 4 graduate students at a variety

of universities in the United States. Their advanced level of English proficiency corresponds with their status as students at an American university in which they are at least exposed to English instruction. To confirm this assumption, TOEFL score was requested from each of the L2 participants. Their TOEFL score mean is 542.40, which is quite good. This score does not necessarily reflect their current proficiency due to the fact that it was taken before their arrival in the US. The L2 learners had been staying in the US for an average of 13.60 months at the time of the test. This residency period reinforces the claim that the TOEFL score does undermine the L2 learners' real English proficiency. Their English will have improved after this period of English exposure.

Table 3. Summary of information of participants

	L2 Learners	Native Controls
Number of People	5	6
Mean of TOEFL Score	542.40	-
Mean of Length of Residency	13.60 months	-

Material

The test material consisted of 14 questions, which were divided into two sets, of which one was multiple interrogatives as in (1-2) and the other one was conjoined interrogatives as in (3). Each question was followed by an answer. Two types of answer were provided: a question with a pair-list answer as in (1) and the one with a single answer as in (2). This division was designed to see if the L2 learners are sensitive to the felicity requirement of multiple interrogatives. Recall that when asked in isolation, multiple interrogatives felicitously require a pair-list answer. Conjoined interrogatives were also provided to see if the L2 learners transfer the L1 values to account for the values in the L2.

There were four different pairings of wh-phrases in the test material, i.e. who-when, who-where, what-where, and what-when. The adjunct wh-phrases 'how' and 'why' were not

included since they are not as much acceptable as other adjunct wh-phrases ‘when’ and ‘where’ (Huang 1982, Aoun et al. 1987 cited

in Bley-Vroman & Yoshinaga 2000). Some sample questions from the test material are presented in Figure 1.

1. Who saw Eri where?	1 Bad	2	3	4	5 Perfect
Linn saw Eri at his office; Lauren saw him in the lunch room, and Danny saw him at the parking lot.					
2. Who saw Eri where?	1 Bad	2	3	4	5 Perfect
Linn saw Eri at his office.					
3. Who saw and Eri where?	1 Bad	2	3	4	5 Perfect
Linn saw Eri at his office.					

Figure 1. A sample of questions from the test material

Procedure

The test material was disseminated to the research participants during November 2008. They were asked to rate the acceptability of each question with the given answer. A five-point scale was used, ranging from 1 “bad” to 5 “perfect.” The test material was distributed mostly online due to the extremely varying universities where each Indonesian participant is studying.

Analysis

To examine whether there is a statistically significant difference between the L2 learners and native controls in their acceptance of multiple interrogatives, a t-test analysis was used. The alpha decision level was set at .05 for all inferential statistics.

Results

The mean of the ratings and the p value indicate that there is a statistically significant difference between L2 learners and native controls in their acceptance of multiple interrogatives. The difference between the acceptance of L2 learners and native controls of multiple interrogatives with a pair list answer was very significant at $p < .05$, $p = .0005$. With single answer, the difference was statistically very significant at $p < .05$, $p = .0003$. This clearly indicates that L2 learners performed very differently in comparison to native controls.

In accordance to the prediction, L2 learners performed like native controls in their rating of conjoined interrogatives as seen in the p value. The results are summarized in Table 4.

Table 4. Summary of mean and p value for L2 learners’ ratings and native controls’ ratings

	Multiple Interrogatives		Conjoined Interrogatives
	Pair-List Answer	Single Answer	
L2 learners	1.45	1.35	3.9
Native controls	3.13	2.83	3.96
p value	.0005	.0003	> .05

If we break down the results per pairing, we can see that for multiple interrogatives with a pair-list answer, there was no significant difference between L2 learners and native controls in their rating of who-when ($p > .05$, $p = .06$) and what-when ($p > .05$, $p = .12$). As for multiple interrogatives with a single answer,

the L2 learners rated significantly differently only for who-where pairing ($p < .05$, $p = .04$). No significant difference was identifiable from the L2 learners and native controls in their ratings of other pairings such as who-when, what-when, and what-where as shown in Table 5.

Table 5. Summary of mean and p value per wh-phrasing pairing

	Multiple Interrogatives							
	Pair-List Answer				Single Answer			
	who-when	who-where	what-where	what-when	who-when	who-where	what-where	what-when
L2 learners	1.60	1.60	1.20	1.40	1.40	1.20	1.40	1.40
Native controls	3.17	3.50	3.17	2.67	3.00	3.00	2.50	2.83
p value	.06	.02	.01	.12	.10	.04	.20	.07

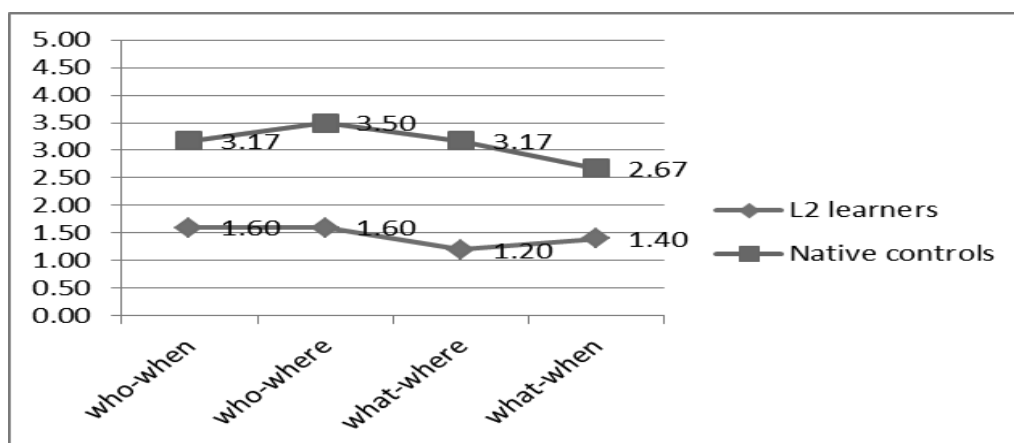


Figure 2. Mean differences among 4 types of multiple interrogatives with a pair-list answer

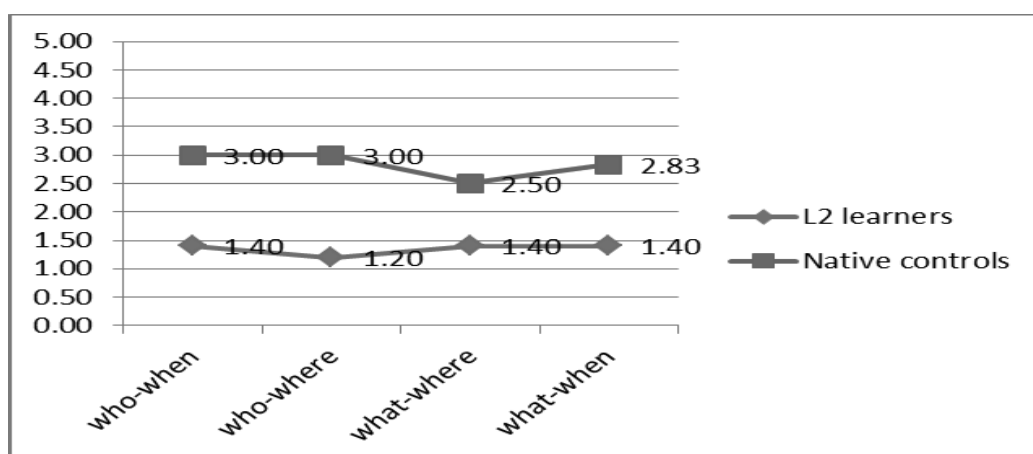


Figure 3. Mean differences among 4 types of multiple interrogatives with a single answer

Figure 2 shows a different pattern of L2 learners and native controls in their acceptance of multiple interrogatives with a pair-list answer especially with *who-where* and *what-where* pairings. Different pattern is also noticeable in Figure 3 in the participants' ratings of multiple interrogatives with a single answer only for *who-where* pairing.

Second Experiment

Participants

A total of 17 Indonesian-speaking learners of English and 23 native speakers of American

English participated in the second experiment. The L2 learners consisted of 3 undergraduate students and 14 graduate students at a variety of universities in the United States. They were considered advanced learners of English based on the mean of their TOEFL score, i.e. 582.18. This score apparently undermines their English proficiency since TOEFL was taken before they came to the US. Besides, they had been staying in the US for an average of 17.76 months at the time of the experiment. The summary of the participants' information is given in Table 6.

Table 6: Summary of information of participants

	L2 Learners	Native Controls
Number of People	17	23
Mean of TOEFL Score	582.18	-
Mean of Length of Residency	17.76 months	-

Material

In general, the test material in the second experiment was relatively similar to that of the first one such that it was split into two sets, multiple interrogatives (1) and conjoined interrogatives (2). The difference was that

each question was presented within a context of situation.

There were six different situations in the test, each of which was followed by a multiple interrogative or a conjoined interrogative. The situations and the questions were scrambled in such a way that the participants would not make any attempt of hyper-analyzing the test by comparing the items or they would not easily figure out what is being investigated. The situations were designed solely in a pair-list answer since such answer is more felicitous than a single answer. A sample of test material is presented in Figure 4.

1. Dave is setting up some knives, forks and spoons on the dinner table. He knew that his mom had made some seating arrangement for the family and guests, but forgot it. Dave wants to figure it out, so he asks his mom: Who will sit where?	1 Bad	2	3	4	5 Perfect
2. Dave is setting up some knives, forks and spoons on the dinner table. He knew that his mom had made some seating arrangement for the family and guests, but forgot it. Dave wants to figure it out, so he asks his mom: Who will sit and where?	1 Bad	2	3	4	5 Perfect

Figure 4. A sample of questions from the test material

Procedure

As in the first experiment, the research participants were asked to rate the acceptability of each question within the given context of situation. A five-point scale was used, ranging from 1 “bad” to 5 “perfect.” The test material was also distributed online.

Analysis

T-test was also used to help determine examine whether there is a statistically significant difference between the L2’ learners and native controls in their acceptance of multiple interrogatives. The alpha decision level was set at .05 for all inferential statistics.

Results

The mean acceptance and p value show that L2 learners still performed significantly differently from native speakers of English in their ratings of multiple interrogatives at $p < .05$, $p = .02$. Surprisingly, the L2 learners outperformed the native controls in their acceptance of conjoined

interrogatives. The summary of the mean acceptance and p value is given in Table 7.

Table 7. Summary of mean acceptance (1-5) and p value

	Multiple Interrogatives	Conjoined Interrogatives
L2 learners	2.51	3.56
Native controls	3.46	3.22
p value	.02	.61

Table 8 presents a more detailed comparison of the L2 learners and native controls in their ratings of each of the questions. As a matter of fact, L2 learners rated such pairings as *who-where* and *who-when* significantly differently from native speakers as obvious from the p value = .001 and .003, respectively. Other pairings of multiple interrogatives were rated by two groups of participants in a relatively similar way. As for the conjoined interrogatives, the L2 learners rated *who-where* significantly differently from the native controls at the p value = .004.

Table 8. Summary of mean and p value per wh-phrasing pairing

	Multiple Interrogatives				Conjoined Interrogatives			
	who-where	who-when	what-where	what-when	who-when	what-where	what-when	who-where
L2 learners	2.65	2.53	2.35	2.18	2.53	4.24	4.29	3.29
Native controls	4.26	3.78	2.83	2.83	2.65	4.00	4.26	1.96
p value	.001	.003	.31	.013	.80	.46	.90	.004

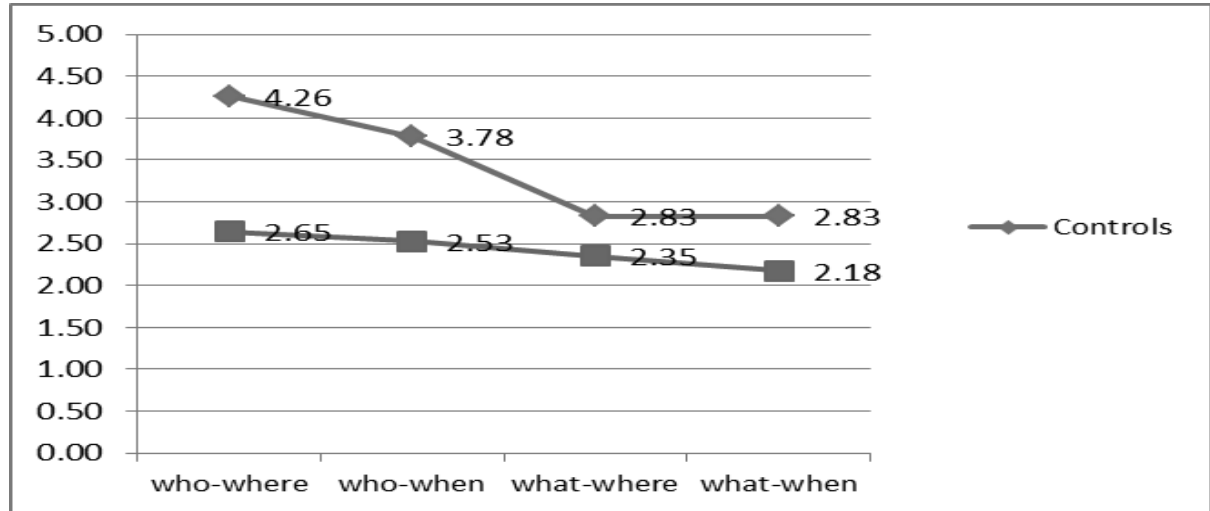


Figure 5. Mean differences among 4 types of multiple interrogatives

Figure 5 shows that the L2 learners do not pattern native-like in their ratings of multiple interrogatives with such pairings as *who-where* and *who-when*, while Figure 6 shows

that the L2 learners pattern differently in their rating of conjoined interrogatives only with *who-where* pairing.

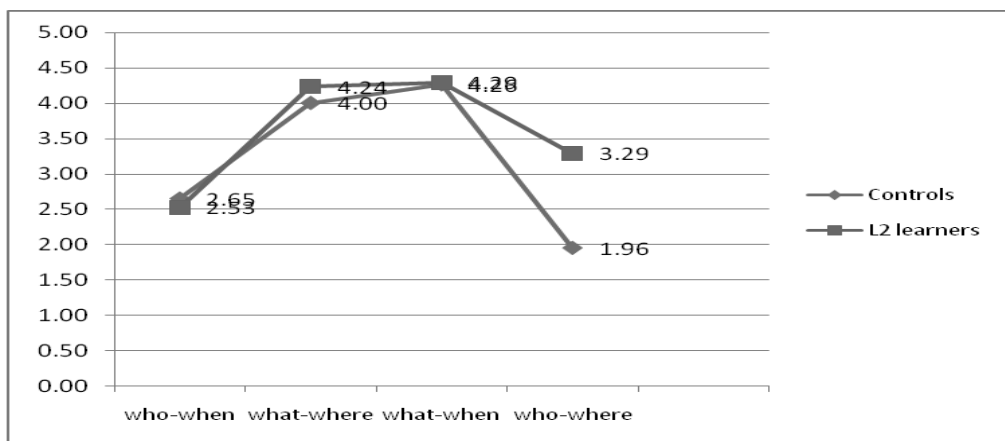


Figure 6: Mean differences among 4 types of conjoined interrogatives

DISCUSSION

The question under investigation is whether high proficient learners of English who are native speakers of Indonesian can acquire multiple focus features such that they can accept multiple interrogatives in English or,

they perform like native speakers in rating the multiple interrogatives. Overall, the statistical results from the first and second experiments confirm that they performed significantly differently from native speakers of English in their acceptance of multiple interrogatives.

In the first experiment, the L2 learners rated the multiple interrogatives both with a pair-list answer and single answer significantly differently from native controls. However, as the results were broken down, we can clearly see that the L2 learners did not reject multiple interrogatives in all possible pairings in English. They accepted most of the wh-phrases pairings except for *who-where* and *what-where* pairings.

One possible reason why the L2 learners rated *who-where* and *what-where* very differently from the native controls could be that they might find it hard to imagine a plausible situation where such a question and answer could be addressed.

In the second experiment, after each question was presented within the context, the L2 learners still did not perform as well as the native controls, particularly in their ratings of

who-where and *who-when*. Recall that they also did not accept *who-where* pairing in the first experiment. At this point, it appears to be baffling to find explanation as to why they accepted some pairings but rejected others. The type of wh-phrase in the pairing did not seem to matter in this respect since almost all of the pairings contained a combination of an argument wh-phrase, i.e. *who* and *what*, and an adjunct wh-phrase, such as *when* and *where*. It might be the case that the situations in which certain wh-phrase pairings are put are not clear enough for the L2 learners so that they might have a hard time figuring out how the multiple interrogative is plausibly addressed. The role the context plays in the L2 learners' acceptance of multiple interrogatives is essential as evidently shown in Table 9. Their ratings increased quite significantly when multiple interrogatives were presented in the contexts.

Table 9. Comparison of mean and increase percentage of L2 learners' ratings

	who-when	who-where	what-when	what-where
Experiment I	1.50	1.40	1.40	1.30
Experiment II	2.53	2.65	2.18	2.35
% of increase	69	89	56	81

Another factor that may contribute to the L2 learners' poor performance for some wh-phrase pairings is input frequency. Multiple interrogatives are not frequently produced by native speakers so that the L2 learners lack positive input that will allow them to reset the parameters. It might be the case that in real-life situations, such multiple interrogatives are frequently avoided because people tend to

request for single information at a time.

Another interesting finding that is worth elaborating is the fact that the L2 learners rated the conjoined interrogatives higher than the native speakers of English did. In particular, the L2 learners rated *who-where* higher than native controls did. We can see the comparison of the participants' ratings in Table 10.

Table 10. Comparison of the participants' ratings in conjoined interrogatives

	Experiment I				Experiment II			
	who-when	who-where	what-when	what-where	who-when	who-where	what-when	what-where
L2 learners	3.60	4.00	4.00	4.00	2.53	3.29	4.29	4.24
Native controls	4.17	3.50	3.83	4.33	2.65	1.96	4.26	4.00
p value	.53	.36	.82	.57	.80	.004	.90	.46

As seen in table 10, there was a very significant difference between the L2 learners and the native controls in their rating of *who-*

where with the p value = .004. This statistics reveals an asymmetry in terms of the potential meaning of *who-where* pairing in the provided

context between the L2 learners and the native speakers of English. Let us look at the context in the test material where *who-where* pairing was situated.

Dave is setting up some knives, forks and spoons on the dinner table. He knew that his mom had made some seating arrangement for the family and guests, but forgot it. Dave wants to figure it out, so he asks his mom: *Who will sit and where?*

The L2 learners seem to generalize the acceptability of conjoined interrogatives in any possible pairings. This strategy may be working since in general there appears to be no semantic restriction in most wh-phrase pairings as obviously seen in the L2 learners' ratings of conjoined interrogatives that mostly pattern like native controls'. This strategy did not work quite well, however. It turns out that the conjoined interrogative *who-where* is not compatible with the given situation. Some native controls pointed out that *who will sit and where* implies that only a certain people out of a group of people will sit probably due to the limited seats. Thus, one possible scenario such a question might fit is where Dave's mom invited a large number of people to come for a party, yet due to limited seats only certain people can sit. In that kind of situation, the question appears to be possible.

The asymmetry indicates that the L2 learners were not aware of the semantic restriction of a particular conjoined interrogative. They employed their L1 values to account for it. In their L1, no such restrictions exist, so the L2 learners may overgeneralize the usage of conjoined interrogatives in their L2. This asymmetry could be attributable to the fact that the L2 learners might be lacking positive input that would enable them to assume the semantic restrictions of certain conjoined interrogatives.

In table 9, we can also notice another fact that both L2 learners and native speakers of English rated the conjoined interrogative *who-when* equally low (mean: 2.53 and 2.65 respectively). This is interesting since the L2 learners exhibited some sensitivity to semantic restriction of this pairing, in contrast

to the situation with *who-where*. Again, this asymmetry might be attributed to the frequency of such conjoined interrogative.

With regard to the prediction made by the two contesting hypotheses, i.e. Full Transfer/ Full Access Hypothesis (FTFAH) and No Parameter Resetting Hypothesis (NPRH), the findings of the current study lend partial support to both hypotheses.

Statistically speaking, NPRH's prediction is borne out due to the fact that there was a significant difference between the L2 learners and the native controls in their acceptance of multiple interrogatives. On the other hand, the fact that the L2 learners performed quite well in their ratings of certain wh-phrase pairings appear to disagree with the prediction. The L2 learners seem to have reset their parameters for certain combination of wh-phrases which sharply contrasts with the NPRH's prediction.

The FTFAH's prediction is also confirmed by the fact that the L2 learners apparently accepted some of the wh-phrase pairings in multiple interrogatives constructions. It indicates that they have reset their parameters to admit new values that are not instantiated in their L1.

It should be noted that I am not making any claims of the end-state grammar of the L2 learners. In other words, the findings of this study do not necessarily confirm that certain properties being investigated are eventually unattainable or not. Besides the fact that there was no test to ascertain if the L2 learners have reached the end-state grammar, all of them were students at a variety of American universities at which case their L2 grammars could still be developing.

CONCLUSION

In conclusion, the findings of this study suggest partial resetting of focus feature to the L2 value, favoring the prediction of Full Transfer/Full Access Hypothesis. The L2 learners accepted most of wh-phrase pairings relatively in the same way as the native controls did, thus indicating the restructuring of parameters to the L2 values. At the same time, the statistical data reveals that overall

the L2 learners were significantly different from the native speakers of English in their ratings of multiple interrogatives in the two experiments, lending support to No Parameter Resetting Hypothesis.

REFERENCES

- Bley-Vroman, R. & Yoshinaga, N. (2000). The acquisition of multiple interrogatives by high- proficiency non-native speakers of English. *Second Language Research*, 16, pp. 3–26.
- Cheng, L. (1991). On the typology of wh-questions. *PhD Thesis*, MIT.
- Cole, P. & Hermon, G. (1998). On the Ontology of Wh-Movement: Wh-Questions in Malay. *Syntax* 1, pp. 221-258.
- Cole, P. & Hermon, G. (2000). Partial WH movement: Evidence from Malay, to appear in Lutz, U., Mueller, G. & A. von Stechow (eds.) *The Syntax and semantics of partial movement*. Cambridge: Cambridge University Press.
- Cole, P., Hermon, G. & Tjung, Y.N. (2005). How irregular is wh-in-situ in Indonesian? *Studies in Language*, 29(3), pp. 553-581.
- Cole, P., Hermon, G. & Norhaida. (To appear). Clefted questions in Malay. In Gil, D. (ed.), *Malay/Indonesian linguistics* (pp.). London: Curzon Press.
- Dayal, V. (2002). Single-pair versus multiple-pair answers: Wh-in-situ and scope. *Linguistic Inquiry* 33, pp. 512-520.
- Dayal, V. (2005). Multiple Wh-questions, in M. Everaert and H. van Riemsdijk, *Syntax Companion* 3, Case #44, Blackwell Publishers.
- Grebenyova, L. (2006). Multiple interrogatives: Syntax, semantics, and learnability. *PhD Thesis*. University of Maryland.
- Hawkins, R. (1998). The inaccessibility of formal features of functional categories in second language acquisition. Paper presented at PacSLRF'98, Tokyo, Japan.
- Hawkins, R. & Hattori, H. (2006). Interpretation of English multiple wh-question by Japanese speakers: a missing uninterpretable feature account. *Second Language Research*, 22, pp. 269-301.
- Hawkins, R. & Chan, C.Y. (1997). "The partial availability of Universal Grammar in second language acquisition: the 'failed functional features hypothesis'". *Second Language Research*, 13, pp.187-226.
- Martohardjono, G. (1993). Wh-movement in the acquisition of a second language: a cross-linguistic study of three languages with and without movement. Unpublished doctoral dissertation. Cornell University.
- Mashudi, B.H. K. (1976). The syntax of Malay interrogatives. Dissertation. Simon Fraser University.
- Pesetsky, D. (1987). Wh-in-situ: Movement and unselective binding. In Reuland, E. & Meulen, A. (eds.) *The representation of (in)definiteness*, pp. 98–129. Cambridge, MA: MIT Press.
- Rizzi, L. (1997). The fine structure of the left periphery. In L. Haegeman, (ed.), *Elements of grammar: A handbook of generative syntax*, pp. 281-337. Dordrecht: Kluwer.
- Saddy, D. (1991). Wh scope mechanisms in Bahasa Indonesia. More papers on wh-movement, ed. by Lisa Cheng and Hamida Demirdash. *MIT Working Paper in Linguistics* 15: pp.183–218.
- Schwartz, Bonnie, D. & Sprouse, R.A. (1994). Word order and nominative Case in nonnative language acquisition: A longitudinal study of (L1 Turkish) German interlanguage. In T. Hoekstra and B. D. Schwartz (eds.). *Language acquisition studies in generative grammar*. Amsterdam: John Benjamins.
- Schwartz, Bonnie, D. & Sprouse, R.A. (1996). L2 cognitive states and the Full Transfer/Full Access model. *Second Language Research*, 12, pp. 40-72.
- Soemarmo. 1970. Subject-predicate, focus-presupposition, and topic-comment in Bahasa Indonesia and Javanese. Ph.D. Dissertation, University of California,

- Los Angeles.
- Stoyanova, M. (2008). *Unique focus: Languages without multiple wh-questions*. Amsterdam: John Benjamins Publishing Company.
- Suranyi, B. (2004). Focus structure and the interpretation of multiple questions. To appear in K. Schwabe and S. Winkler (eds.). *Information structure and the architecture of grammar: A typological perspective*. Amsterdam: Benjamins.
- White, L. (2007). *Second language acquisition and universal grammar*. Cambridge: Cambridge University Press.