

**Further Evidence for the Separation Hypothesis :
The Case of Advanced Iraqi Learners**

Dr. Balqis I.G. Rashid
Dept. of English / College of Education
University of Basrah

Abstract

In this study two hypotheses are tested , the first of which is concerned with the relation between Flynn and Martohardjono's (1994) the Separation Hypothesis and L2 acquisition , the second, on the other hand , is concerned with the constraining process imposed by UG on grammars constructed by L2 learners .The conclusions derived from the study show that , among other things , these two hypotheses are accepted and that the Separation Hypothesis is the only hypothesis among the existing ones that has explanatory adequacy.

1. Introduction :

Many of the current studies devoted to topics related to child first language (L1) acquisition and adult second language (L2) acquisition / learning are considered as attempts towards the understanding of the cognitive processes characteristic of language learning in general. Epstein , Flynn and Martohardjono , (henceforth EFM),(1996:2) believe that “ L2 learners, specifically adult learners, bring capacities to bear on the language learning process that are both similar to and different from the capacities of children.” Investigations of L2 acquisition can help to develop linguistic theories which are mainly concerned with providing “an empirically accurate and comprehensive characterization of language capacity and learning ... [and then] must accommodate the facts of L2 acquisition.” (ibid.)

The present study is an attempt to explore the relationship holding between Chomsky's Universal Grammar (UG) and the acquisition of English as a second / foreign language by Advanced Iraqi Learners (henceforth AILs).It is based on the following hypothesis :

The Separation Hypothesis (Flynn and Martohardjono, 1994 :321) is capable of explaining the L2 acquisition process conducted by AILs , (see section 3).

2.The relation between UG and language acquisition :

Chomsky (1995:13) affirms that his Principles and Parameters theory “is not a precisely articulated system, but rather a particular approach to classical problems of the study of language”This theory is intended to classify descriptive statements into two categories. The first category includes language-invariant statements which are called principles “including the parameters each on a par with a principle of UG ..”(ibid.:25).On the other hand, the second category comprises the language particular statements that represent specifications of particular parametric values.

During the last 50 years, or so, Chomsky was very much concerned with all the aspects related to that particular component of the mind / brain which he calls the language faculty , especially its different states that represent some array of cognitive traits and capacities. According to him, this faculty has a genetically determined initial state that develops later on to a steady state representative of a language-specific grammar. Chomsky (ibid.:14) states that “the initial state appears to be uniform for the species”He calls the theory of the initial state UG.In this theory principles and parameters are taken to construct the innate cognitive faculty that is responsible for and facilitates language acquisition.Chomsky (1980:38) expresses this belief saying that UG consists of a highly structured and restrictive system of principles with certain open parameters, to be fixed by experience.As these parameters are fixed, a grammar is determined, what we may call a ‘core grammar’.

3. On the Identity, Separation, and Access Hypothesis :

EFM (1996:6-7) contend that in order to answer the following question : "whether UG is accessible in L2 acquisition ?" one needs to consider two possible relationships that may hold between UG and core grammars. According to the first relationship, UG becomes the core grammar after fixing the parameters during L1 acquisition. In such a case, only an indirect relation between UG and L2 grammar would be possible. The second possible relation between UG and core grammars is that these two are distinct but related constructs. They (ibid.) argue that " under this latter view, parameter setting does not entail changing the basic form of UG but instead consists of incorporating into each stage of the grammar the particular option that accords with the primary language data... ." These two possible relationships between UG and core grammars have been already proposed by Flynn and Martohardjono, (henceforth FM), (1994:321) under the titles of the Identity Hypothesis and the Separation Hypothesis, respectively. They (ibid.:320-21) argue that upon assuming that "L2 acquisition derives from the same cognitive faculty as L1 acquisition, it can now provide us with insights and answers not necessarily provided by L1 studies alone. One of the issues it can shed light on , for example, is the nature of the relationship between the language faculty and the speaker's representation of the language-specific grammar." Three related sub-hypotheses can be explained according to either of these two main hypotheses. "The first of these –the no-access hypothesis- claims that child L1 acquisition and adult L2 acquisition are fundamentally different cognitive processes the former deriving from the language faculty, the latter determined by non-linguistic processes." (EFM, 1996:9). Advocates of the no-access hypothesis (such as : Clahsen and Muysken ,1986; Clahsen ,1988; and Bley-Vroman ,1989) suggest that UG is unavailable for L2 acquisition and that some other cognitive or mental (non-linguistic) learning strategy must be activated. L2 ,under this model, does not incorporate the principles of parameter settings of UG. Such claims are contra factual and it seems that the no-access hypothesis does not even attain descriptive adequacy since it fails to specify the L2 learner's knowledge of language as represented in grammar. Furthermore, EFM (1996:31) point out that linguistic statements based on this hypothesis are both 'speculative' and 'arguably contradictory' for they are forced to retreat from the fundamental claim that only 'nonlinguistic principles' govern L2 acquisition.

The second sub-hypothesis is the partial-access hypothesis. It claims that "UG knowledge is not totally unavailable, but that it is limited in very specific ways that vary according to the particular version of the hypothesis." (ibid.). In other words, the L2 learner has access only to those universal principles characteristic of the grammars of all languages. Moreover, s/he has access only to those parametric values instantiated in her/his L1 while attempting to learn L2. Proponents of the partial-access hypothesis (such as : Schachter, 1989; Vainikka and Young-Scholten ,1991; and Strozer, 1992) argue that the only version of UG

available to L2 learner would be modelled into L1. Such a claim can be falsified from different angles. If we accept their view that the L2 learner has only L1 parameter values at his disposal and that whenever there is a mismatch between the L1 and L2 grammars, then UG fails to constrain L2 aspects of acquisition; this would suggest that the L2 learner should reset his parameters in order to acquire the L2. However, this view is both mistaken and inaccurate simply because it means that after learning the L2 learner would lose his L1 parameter settings which consequently leads to a loss of the L1 grammar in his mind/brain. The alternative is to have new parameter settings for the L2 by means of having a continuous access to UG. In addition, there seems to be sufficient evidence against the partial-access hypothesis advocates' claim concerning non-parametric variation. Such evidence is based on L2 learners' judgements of grammaticality and acceptability/usability. It is believed that such judgements stem from a biologically determined knowledge (cf. Atkinson, 1992). EFM (1996:44-49) give some more pieces of compelling evidence against the partial-access hypothesis. They (ibid.) present some 'error data from adult L2 acquisition' and the 'non-transfer of language-specific aspects' as indicators of the failure of this hypothesis and conclude that both of the UG principles and parameters are "not instantiated in the L1 and those that apply vacuously in the L1 but are operative in the L2 can be acquired by the L2 learner." Of course, this suggests that both of L1 and L2 acquisition derive from the same linguistic principles.

The no-access hypothesis and the partial-access hypothesis are two different but complementary versions of FM's Identity Hypothesis. On the other hand, the third access hypothesis namely the full-access hypothesis further explains and supports their Separation Hypothesis. Recall that according to the latter hypothesis "UG and language-specific grammars are distinct but intrinsically related entities ... In this case, UG is the cognitive module that acts as a constraint on core grammars during acquisition but remains, itself, constant." (ibid.:321). This suggests, in effect, that UG is continuously available to the L1 and L2 learner simultaneously. In other words, both of the L1 and L2 acquisition processes derive from the same source (i.e. UG). Chomsky (1995:131) asserts that "there is only one human language, apart from the lexicon, and language acquisition is in essence a matter of determining lexical idiosyncrasies."

The first support for the original version of the Separation Hypothesis comes from bilingual children. FM (1994:321-22) contend that for the sake of explaining the simultaneous acquisition processes of different languages having different parameter settings, one should understand UG as "an entity separate from language-particular grammars." They (ibid.) give an example represented by the case of bilingual English/Japanese children who have to set the parameter of 'head direction' differently for these two different languages. English is a head-initial language whereas Japanese is a head-final language. To elaborate

Further Evidence For the Separation Hypothesis :

further on this point, consider the following examples of parameterized principle, (from Cook, 1988) :

1.a.Principle of head direction : A language has its heads on the same side in all its phrases. This parameter has two settings : head-first and head-final.

b.English is head-first

i.liked the man

ii.in the bank

c.Japanese is head-final

i.nihon - ni (a prepositional phrase)

Japan - in

'in Japan'

ii.watahshi -- wa nihon desu .(a verb phrase)

I - topic Japanese am

'I am Japanese.'

As can be noticed in the above example, which concerns the head-complement order parameter, in (b-i) the verb 'liked' is the head of the whole verb phrase which precedes its noun phrase complement . Furthermore, in (b-ii) the preposition 'in' is the head of the prepositional phrase and it precedes its noun phrase. On the other hand, in the Japanese phrases both of the verb and the preposition follow their complements. So, FM (1994:322) found out that those bilingual children have the cognitive ability to identify the value of this parameter for their two different languages.

EFM's the full-access hypothesis is only a reflection of the Separation Hypothesis. They (1996:89) maintain that the former "postulates that the L2 learner's inventory of functional categories [given by us] is complete, and hypothesizes that some of the errors observed are due to performance factors or non-syntactic deficits, including lexical and morphological deficits." To further support their hypothesis, they conducted an experimental study exploring the acquisition of functional categories by (51) subjects (33 Japanese-speaking children and 18 Japanese-speaking adults) learning English as an L2. They arrived to the conclusion that the full-access hypothesis, unlike the other two access hypotheses, "exhibits the explanatory power needed to account for L2 learners' knowledge of language." In other words, UG in its entirety is available to the L2 learner.

Thus, the researcher agrees with FM (1994:322) who declare that "the study of adult L2 acquisition can provide unique and, we agree, essential empirical evidence for the Separation Hypothesis" To further justify this last statement an experiment was conducted on AILs of English, and the details are given in the following section.

4. The case of AILs of English :

In order to empirically test the validity of the Separation Hypothesis, an experiment was conducted in which (40) AILs of English participated. These Iraqi subjects, aged 21-25 years, have been experiencing the learning process of English as a foreign language for at least (13) years. The hypothesis tested in this experimental investigation reads as follows :

The grammars constructed by the AILs of English are fully and continuously constrained by the principles and parameter settings of UG ; thus, they show an ability to newly set their parameters in their attempt to acquire English.

In order to check the validity of the above stated hypothesis, the subjects were given stimulus sentences (exemplified in -2- below) that were mainly designed to evaluate the learners' knowledge of word-order, head-direction, pro-drop, and agreement parameter settings in English.

2. Examples of stimulus sentences :

a. Word-order

Adam helps his father in their land every day.

b. Head-direction

The talented musician played Bethoven's symphonies in the party.

c. Pro-drop

∅ want to go to the central library. (Note that the symbol ∅ means absence of a feature)

I attend the university annual conference every year.

d. Agr (reement)

i. Subject-Verb Agr

She teaches English.

We love Iraq.

ii. Adjective-Noun (p) ∅ Agr

The three clever students constructed one simple sentence, two compound sentences, and Three complex ones.

The experimental tasks designed for eliciting the required sentences are of two general types : an elicited imitation task and a diagnostic – explanatory task.

Of course, prior to testing, the researcher was assured that all of the subjects know the meaning of every single item in the stimulus sentences by means of asking the subjects to give the English and / or Arabic synonyms of these items. By doing so, one could increase the probability that any difficulty encountered by any of the subjects in producing the desired constructions would be attributed to the structure of that particular construction and not to the subject's ignorance of the meaning of a specific lexical item. Moreover, in order to be certain that the subjects were ready to be tested, they were pertained on the experimental tasks.

Further Evidence For the Separation Hypothesis :

The results of the experimental tasks have shown that concerning the learners' knowledge of the English word-order parameter setting, they were almost 100% aware of the fact that unlike Arabic which has the following word-order : verb + subject + object (or complement); English has the following word-order : subject + verb + object (or complement). All of the subjects elicited sentences reflected their consciousness of the mismatch between the two word-orders. Hence, a new word-order parameter setting was instantiated by the subjects according to which the subjects of their own elicited sentences, unlike in their L1, precede verbs. Aspects of stylistic variation and topicalization according to which word-order in the L1 and L2 may differ were pointed to by many of the subjects. This, again, reflects their awareness of the existence of such sentences in these two languages, though the stimulus sentences do not contain any.

Regarding the parameter setting of head-direction, as previously mentioned English is a head-first (or initial) language. Arabic is generally, considered a head-first language, just like English. 'Generally' is underlined in the immediately preceding sentence to draw the reader's attention to the fact that heads (such as nouns, verbs, adjectives, prepositions) in any given language need not either consistently precede or consistently follow their complements, as suggested by Cook (1988), simply because this is a too strong hypothesis to make. This hypothesis can be easily falsified by Arabic adjectival phrases. Recall that we characterized Arabic as a head-first language; that is to say in its noun, verb, prepositional and adverbial phrases the heads (i.e., N, V, Prep, Adv) precede their complements. However, this is not true of its adjectival phrases. In Arabic adjectival phrases, nouns precede (and not follow) their attributive adjectives, and this constitute part of the L1 speaker's knowledge as shown in the following examples :

3. Examples showing the head-direction parameter setting in Arabic (notice that the heads are underlined) :

i. alrajul lathi maata (a noun phrase)

the man who died

ii. rasimtu wardatan . (a verb phrase / sentence)

painted I a flower

I painted a flower.

iii. fil bayti (a prepositional phrase)

in the house

iv. Hawl al Hujrati (an adverbial phrase)

around the room

The subjects' elicited sentences exhibit that they have no problems with the head-direction parameter which has almost the same parameter setting in their L1 and L2. As for the difference between the head-direction of adjectival phrases

in these two languages, it seems that they have already activated a new parameter setting since the first years of their L2 learning process.

As for the pro-drop parameter setting, languages are classified either as pro-drop languages, or optionally pro-drop languages, or non-pro-drop languages. Galasso (2002:6) states that "in Spanish or Italian, pro is an empty category that can manifest without an overt counterpart (such languages are termed 'pro-drops'); whereas in English or French, pro is an empty category which must have an overt counterpart (such languages are termed 'non-pro-drops')." As far as Arabic is concerned, it is an optionally pro-drop language in which pro is an empty category which may or may not manifest with an overt counterpart. In other words, Arabic is a language that can have overt subjects or missing ones, as exhibited by the following examples :

4. Examples showing sentences with overt (underlined) subjects (in -a-) and others with missing subjects (in -b-) :

a.i. tarjama aHmadun kitaaban .

translated Ahmad a book

Ahmad translated a book.

OR

ii. aHmadun tarjama kitaaban .

Ahmad translated a book.

b.i. sharibtul shaaya .

drank I the tea

I drank the tea.

None of the (40) subjects elicited pro-drop English constructions, noting that such constructions would be both ungrammatical and unacceptable. During the diagnostic-explanatory task, many of them indicated that English is, unlike Arabic, a language which necessitates the obligatory occurrence of an overt subject. Such responses mean that these subjects know that they cannot transfer their L1 knowledge of the possible pro-drop constructions into English and overgeneralize their pro-drop parameter setting into English. This clearly suggests that these Iraqi subjects have successfully broken the L1 grip and L1 interference has not influenced their newly activated parameter settings.

As for the agreement parameter of subject-verb constructions, in Arabic this parameter is set to indicate agreement in person (first, second, and third), number (singular, dual, and plural), and gender (masculine and feminine). The following examples clarify this parameter-setting in Arabic :

5. Examples showing subject-verb agreement in Arabic : (Note that bracketed subjects are optional, viz. pro-drops .)

a.i. fahim +tu (ana) l darsa. (1st, sing.)

Further Evidence For the Separation Hypothesis :

- understood+I (I) the lesson
I understood the lesson.
- ii.fahim+naa (naHnu) l darsa. (1st, dual + pl.)
understood+we (we) the lesson
We understood the lesson.
- b.i.fahim+ta (anta) l darsa. (2nd, sing./mas.)
understood+you (you) the lesson
You understood the lesson.
- ii.fahim+ti (anti) l darsa. (2nd,sing./fem.)
understood+you (you) the lesson
You understood the lesson.
- iii.fahim+tumaa (antumaa) l darsa. (2nd,dual /mas.& fem.)
understood+you (you) the lesson
You understood the lesson.
- iv.fahim+tum (antum) al darsa. (2nd,pl./mas.)
understood+you (you) the lesson
You understood the lesson.
- v.fahim+tunna (antunna) l darsa. (2nd,pl./fem.)
understood+you (you) the lesson.
You understood the lesson.
- c.i.fahim+a (huwa) l darsa. (3rd,sing./mas.)
understood+he (he) the lesson
He understood the lesson.
- ii.fahim+at (heya) l darsa. (3rd,sing./fem.)
understood+she (she) the lesson.
She understood the lesson.
- iii.fahim+aa (humaa) l darsa. (3rd,dual /mas.)
understood+they (they) the lesson.
They understood the lesson.
- iv.fahim+ataa (humaa) l darsa. (3rd,dual /fem.)
understood+they (they) the lesson
They understood the lesson.
- v.fahim+u (humu) l darsa. (3rd,pl./mas.)
understood+they (they) the lesson
They understood the lesson.
- vi.fahim+na (hunna) l darsa. (3rd,pl./fem.)
understood+they (they) the lesson
They understood the lesson.

One can notice in the above examples that agreement between the verbs and subjects of these sentences is expressed by suffixes denoting person, number, and gender. Note that the subjects in these sentences are bracketed to indicate their optionality of occurrence. Moreover, all of the above sentences have the

word-order : vso ; however, they can have another possible word-order, namely svo , and in this case the occurrence of the preposed subjects become obligatory, reflecting emphasis on the doer of the action.

On the other hand, as we know subject-verb agreement in English is only in person and number. Thus, to the exclusion of the third person singular which is marked by the suffix (-s), all the other forms are unmarked for person and number. That is to say, the Iraqi learner of English needs to have a new parameter setting that is marked only for the third person singular in the simple present tense. The subjects' elicited imitation sentences show that only few of them (5 in number) have not yet instantiated this particular parameter setting. After finishing the test, the researcher asked the subjects about the reason behind their ungrammatical sentences and they replied that they know the rule but they have forgotten to apply it. This means that such learners are aware of the existence of such a parameter setting in the L2 ; however, it seems that they have not yet activated it and accordingly they failed in giving grammatical sentences.

Agreement between a noun and its following adjective in number and gender is a parameter setting that is characteristic of Arabic but not English. Consider the following examples :

6.Examples showing noun-adjective agreement in Arabic :

i.a.waladun nabeehun. (sing./mas.)

a boy smart

a smart boy

b.waladaani nabeehaani. (dual/mas.)

two boys smart

two smart boys

c.awlaadun nabeehuun. (pl./mas.)

boys smart

smart boys

ii.a.bintun jameelatun. (sing./fem.)

a girl beautiful

a beautiful girl

b.bintaani jameelataani. (dual/fem.)

two girls beautiful

two beautiful girls

c.banaatun jameelaatun. (pl./fem.)

girls beautiful

beautiful girls

In the above examples, the adjectives follow their nouns, and there is agreement between the two in number and gender. As mentioned above, this is not the case in English, in which (attributive) adjectives always precede their nouns and there

Further Evidence For the Separation Hypothesis :

is no whatsoever kind of agreement between the two. Hence, the parameter setting (Adjective+Noun (phrase) \neq Agr), which indicates the absence of agreement between an adjective and its following noun (phrase), is newly activated by the Iraqi learners of English; whereas the parameter setting (Noun+ Adjective Agr) which expresses the presence of agreement between a noun and its following adjective, is instantiated already by these Arabic speakers. When confronted with the stimulus sentences showing lack of agreement between a noun and its preceding adjective, none of the subjects transferred his/her L1 agreement parameter setting into the L2. Thus, no single imitation sentence that was elicited by the subjects reflected the deactivation of the English agreement parameter setting. This suggests, in effect, that those subjects have successfully set the English agreement parameter setting on and have managed to separate their own L1 parameter settings from the L2 new parameter settings.

5. Conclusions :

- One can conclude from the preceding experimental investigation that :
1. AILs of English seem to have a full and continuous access to UG, which enables them to activate new parameter settings characteristic of L2.
 2. This allows them to separate the affected two grammars of L1 and L2 from each other, though both are still contained in the same language faculty.
 3. This separation is maintained by means of the activation of the newly gained parameter settings, whenever those learners express themselves in the L2 and setting them off and retaining their original parameter settings of their L1 when codeswitching into their mother tongue.
 4. The subjects' elicited imitation sentences prove that they are, just like native speakers, theoretically speaking, able to produce an infinite number of L2 new sentences. This in effect means that they have somewhat gained the sense of creativity usually assigned to native speakers. Since creativity is, as we said, a characteristic of native language speakers that is derived from the principles and parameters of UG, then one can say that L2 learners as represented by AILs of English do have a direct access to UG.
 5. It seems that, unlike their unconscious activation of their own L1 parameter settings, the AILs of English are quite aware and conscious of their activation process of the English /L2 parameter settings whenever the chance/circumstance necessitates the action. This specific view was concluded from the subjects' discussion registered during the diagnostic-explanatory task.
 6. Accordingly, one can say that both of the hypotheses stated in this study, i.e., the hypothesis underlying the present study and the hypothesis of the experimentation, are accepted and this means that the Separation Hypothesis is

up to now the only hypothesis, among the others, which has not only observational and descriptive adequacies but also explanatory adequacy.

References

- Atkinson, M.(1992).Children's Syntax : An introduction to Principles and Parameters Theory. Blackwell.
- Bley-Vroman, R.(1989). " What is the logical problem of foreign language learning ?" Linguistic Perspectives on Second Language Acquisition. (eds.) J. Schachter & S. Gass.CUP.
- Chomsky, N.(1980).Rules Representations. Columbia University Press.
- (1995).The Minimalist Program. Cambridge, Mass. : The MIT Press.
- Clahsen, H.(1988). " Parameterized grammatical theory and language acquisition : A study of the acquisition of verb placement and inflection by children and adults." Linguistic theory in second language acquisition. (eds.) S. Flynn & W. O'Neil.Kluwer.47-75.
- & Muysken, P.(1986). " The availability of Universal Grammar to adult and child learners : A study of the acquisition of German word order."Second Language Research, 2 : 93-119.
- Cook, V.J.(1988).Chomsky's Universal Grammar. Blackwell.
- Epstein, S.D., Flynn, S., & Martohardjono, G.(1996). " Second Language Acquisition: Theoretical and Experimental Issues in Contemporary Research." Behavioural And Brain Sciences, Dec., 1-136.
- Flynn, S. & O'Neil, W.(1988b).Linguistic Theory in Second Language acquisition.Kluwer.
- & Martohardjono, G.(1994). " Mapping from the initial state to the final state : The Separation of Universal Grammar Principles and Language Specific Properties." Syntactic Theory and First Language Acquisition : Cross-Linguistic Perspectives. Vol. 1 : Heads, Projections, And Learnability, (eds.) B. Lust, M. Suter & J. Whitman, Earbaum.319-335.
- Galasso, J.(2002). " Transferring the 'pro-drop' parameter from Spanish to English." Interference in Second Language Acquisition : A Review of the Fundamental Difference Hypothesis , California State University Press.
- Schachter, J.(1989). " Testing a proposed universal." Linguistic Perspectives on Second Language Acquisition , (eds.) J. Schachter & S. Gass.CUP.
- Strozer, J.(1992). " Non-native language acquisition from a principles and parameters perspective." Current Studies in Spanish Linguistics , (eds.) H. Campos & F. Martinez-Gil, Georgetown University Press.
- Vainikka, A. & Young-Sholten, M.(1991). " Verb raising in second language acquisition : The early stages." Theories de Lexikons. Nr.4 : Universal Grammar in Second Acquisition. The LEXLERN Project , Universitt Dusseldorf.

Further Evidence For the Separation Hypothesis :

أدلة إضافية لاثبات فرضية الانفصال :
حالة الطلبة العراقيين ذوي المستوى المتقدم

الخلاصة

اختبرت فرضية فصل في الدراسة الحالية : أو لاهما ترتبط بين فرضية الانفصال
لنظائر وعلاوة على ذلك (1974) ، وعلم لغة ثانية أو أجنبية ، أما الثانية
لتعني بالشروط نفس تفرضية النظرية اللغوية الكونية على الأنظمة اللغوية التي
بكونها متعلمو اللغات الثانية أو الأجنبية. وقد وضحت نتائج هذه الدراسة قبول
هاتين الفرضيتين . وأن فرضية الانفصال هي الفرضية أو حدود بين الفرضيتين
الأخرى التي يمكن اعتبارها ذات قوة تفسيرية .