Multiple language learning

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Abstract

English is no longer seen as an extra qualification and it has become a sine qua non basic skill rather than a foreign language, resulting in the slogan English is not enough not only for second language speakers of English but also for the L1 speakers. Accordingly, in this paper, we review studies on multilingualism and simultaneous or successive learning of multiple languages and describe the languages involved in terms of their qualitative or quantitative properties by referring to accessibility, universal grammar and initial state theories, finally aiming to dissipate the terminological ambiguity in the field.
In this context, based on the current theories of Universal Grammar on lexical and grammatical learning and theoretical and applied studies on multilingualism and multilingual individuals, we put forth approaches and strategies suggested for simultaneous or successive learning of multiple languages. The results obtained from the study not only contribute to the terminology but also understanding of the simultaneous and successive learning of multiple languages.

Keywords: languages, learning, strategies, multilingualism.

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1. Introduction

“A multilingual individual is anyone who can communicate in more than one language, either being active (through speaking and writing) or passive (through listening and reading)” (Wei, 2008). Multilingualism refers to the number of languages involved either as languages spoken by an individual or as languages in a particular society. With the action plan enforced between 2004 and 2006 by the European Union (EU), a policy requiring EU citizens to learn at least two more languages apart from their native languages was launched and personal multilingualism was encouraged. Therefore, EU launched a policy encouraging lifelong language learning not only through the formal education for school age children but also through mass education for adults. The aim of the program was not only to launch a life learning activity but also to encourage and develop multilingualism in European society. According to the plan, while one of the languages preferably proposed to be learned is a widely-spoken society language, the other is expected to be a neighbouring or minority language. In most parts of the world and in Turkey as well, English is the first language when it comes to foreign language. However, English is no longer seen as an extra qualification and it has become a sine qua non basic skill rather than a foreign language. Therefore, the slogan “English is not enough” was put into words not only for second language speakers of English but also for the first language speakers and the period when the speakers of this global language had privileges came to an end” (Graddol, 2006). Therefore, the demand for learning of different neighbouring or prestigious languages as a foreign language is expected to increase in the near future.

Although a good deal of research has been carried out on multilingualism dealing with social, individual or acquisitional aspects of bilingualism or multilingualism, we only cited linguistic studies due to our research interest in this study. During our review, we also found that there is a lot of confusion and ambiguity in concepts such as L1, L2, L3, foreign language, multilingualism, bilingualism, language learning or acquisition, multiple language learning, etc. In a study carried out by Singleton (1987), a multilingual case of a beginner adult learner of French whose native language was English and who had some knowledge of Irish, Latin and Spanish was undertaken. The participant had learnt Irish and Latin at school and Spanish during a 3-year professional visit to Spain. He also learned some French during his short visits to France. During his French conversation recorded, some significant findings were obtained. In the study, it was found that when he tried to produce French, the participant transferred lexical or grammatical elements for the most part from Spanish as rather than English, Irish or Latin. This finding may show us that the participant referred to Spanish as a source of linguistic data since he was aware of the fact that these two languages are structurally similar and benefited from this linguistic awareness in learning a new foreign language. In another study, McLaughlin (1990) points to the relation between learners’ linguistic awareness and ability of learning. In her studies, she found that multilingual learners use different and more strategies compared to monolingual students. In another study carried out in Catalonia on the performances of the bilinguals during foreign language learning, it was found out that bilingual children outperformed monolinguals in the acquisition of English as a foreign language (Cenoz & Valencia, 1994). Ender (2007) studied reading skills of multilingual learners of French at Innsbruck University in Austria. She found that experienced language learners who referred to their other second languages outperformed other learners who did not have prior second language knowledge. As for the studies on L1 effect on L2, or L1 transfer to L2, there are studies investigating whether the relationship between L1 transfer and L2 performance is positive or negative. A study carried out by Jiemin was designed to investigate L1 pragmatic transfer in requests performed by Chinese learners of English at low L2 proficiency level and at high L2 proficiency level and the relation between L1 pragmatic transfer and L2 proficiency. The research results showed that L1 transfer decreases with the increase of L2 proficiency such as learners’ use of direct strategies. These results support the idea that high proficiency L2 learners are less likely to transfer their native language. Eng and Muftah (2011) studied the acquisition of English verb movement by L1 Arabic speakers of L2 English. The findings of the study indicate that the adult L1 Arabic speakers of L2 English have difficulty in acquiring the functional features different from those found in the L1. One of the studies which drew our attention during the literature review in this
field was the one carried out on the place of the students' native language or L1 in learning English as a foreign language by Jadallah and Hasan (2010). In the study, a number of instructors were interviewed on their use of Arabic in EFL classrooms. The results demonstrated that all of the instructors who were native speakers of English and 62.5% of non-native speakers of English were in favour of using Arabic in EFL teaching. In another study on L2 learners’ collocational competence and development, Henriksen (2013) cited the studies by Yamashita and Jiang (2010) and Wolter and Gyllstad (2011) on the role of the L1 for collocational development and use. He states that Yamashita and Jiang used an acceptability judgement task to investigate L1 influence on collocational development for both second and foreign language learners. Accordingly, he reports that they compared and contrasted both error rate scores and reaction time scores for collocations with L1 equivalents and without L1 equivalents and found that the foreign language learners did better on both scores, whereas the second language learners only did significantly better on the error rate scores for the collocations with L1 equivalents. These results also show that both the L1 and the amount of exposure influence L2 collocational development. He also quotes that Wolter and Gyllstad (2011) studied on the influence of L1 lexical knowledge on the creation of collocational links in the L2 mental lexicon. Via priming tasks and a receptive test of collocational knowledge, it was found that collocations with L1-L2 equivalents were processed much faster than collocations without L1-L2 equivalents. According to these results, Henriksen assumes that links in the mental lexicon between the L1 and L2 play an important role in L2 collocational development and use. In a more recent study by Haukas (2015), Norwegian language teachers’ beliefs about multilingualism and the use of a multilingual pedagogical approach in the third-language (L3) classroom were surveyed. The teachers were found using of their students’ linguistic knowledge of Norwegian and English when teaching the L3, however, they rarely refer to their previous linguistic experience or knowledge since they believe that learning an L3 is completely different from learning L2 English. In a recent study on multilingual phonology, Onishi (2016) suggests that L3 learners’ phonological perception is positively influenced not only by experience with specific L2 contrasts, but also by the general experience of learning a foreign language. Principles and Parameters Theory (PPT) (Chomsky, 1993) and Minimalist Program (Chomsky, 1995) under the scope of the theory of Universal Grammar (UG) make up the theoretical framework of this paper. Furthermore, among the studies on multilingualism, Wilton (2009) gave us opinion on how multilingualism has been tackled so far and how it should be approached in our study. In this theoretical study, considering previous research and current linguistic studies on multilingualism and multiple language learning individuals, we aim to discuss the idea of simultaneous or successive learning of more than one foreign language is theoretically possible. Moreover, another aim is to discuss on the relation between grammatical competence, linguistic awareness about other languages known and learning a new language or languages. We also aim to suggest strategies and approaches for simultaneous learning of multiple languages for learners of second, third, fourth and even more languages and to contribute to the training of multilingual equipped individuals who can speak politically, economically and academically prestigious languages apart from neighbouring ethnic languages.

In this part of the study, we introduce the aims, previous studies from which we inspired and obtained valuable data and the outlines of the study. In part two, we will introduce the theoretical framework, including initial state and accessibility discussions on which our study is established. Then, in the third section, and fourth sections, multilingualism, multiple language learning and strategies for learning multiple foreign languages will be discussed in light of current linguistic studies and multilingual practices. The last part is the conclusion.
2. Universal Grammar, Language Acquisition and Language Learning

UG and Second language acquisition (SLA) research has been interested in the built-in knowledge of language and inspired by it to explain initial state and final state discussions in first, second or additional foreign language (L1, L2, L3, ... etc.) acquisition or learning processes, as in the case of the hypothesis that “the initial state of L2 acquisition is the final state of L1 acquisition” (Schwartz & Sprouse, 1996). Accordingly, the mind of a new born baby with no any active language is defined as the initial zero state (S0) and an adult native speaker with an efficient language use is defined as the final state (Cook & Newson, 1996). The UG principles are regarded as principles of the initial state, which means a new born baby has no grammatical knowledge of any language but the UG (Cook & Newson, 1996). L1 acquisition, in this sense, is defined as an improvement from no language state (S0) to full competence (Ss). According to Chomsky (1964), children hear sentences in their surrounding which are called “the primary linguistic data”, they process this knowledge within their black box called the “Language acquisition Device (LAD)” and finally they achieve competence in the language, which is defined as “generative grammar”.

<table>
<thead>
<tr>
<th>Input</th>
<th>Language Acquisition Device</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>(primary linguistic data)</td>
<td></td>
<td>(a generative grammar)</td>
</tr>
</tbody>
</table>

Figure 1. The LAD model of L1 acquisition (Cook & Newson, 1996, p.80)

In 1980s, SLA studies started to be interested in principles and parameters theory and thus the relation between L1 and L2 has been the focal point of the discussions. Cook and Newson adapted the LAD model to L2 acquisition and illustrated the model as shown in Fig 2:

<table>
<thead>
<tr>
<th>L1 Input</th>
<th>principles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UG</td>
</tr>
<tr>
<td></td>
<td>parameters</td>
</tr>
</tbody>
</table>

L1 grammar
| (principles and parameter settings and vocabulary) |

<table>
<thead>
<tr>
<th>L2 Input</th>
<th>principles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UG</td>
</tr>
<tr>
<td></td>
<td>parameters</td>
</tr>
</tbody>
</table>

L2 grammar
| (principles and parameter settings and vocabulary) |

Figure 2. LAD extended to L2 Acquisition (Cook &Newson, 1996, p.87)

We understand from the illustration above that during L1 or L2 acquisition, both L1 and L2 linguistic data are processed by UG principles and parameters in the LAD and the UG is accessible in both cases. However, in case of multiple languages exposed simultaneously from the birth, the illustration above will not be explanatory enough since this new condition is described as bilingualism (or multilingualism). Then, if the UG is the initial grammatical knowledge state for a new born baby, then what is the initial state of L2 or L3 learners? At this point, Schwartz and Sprouse (1996) suggest that L3 learning is fundamentally different from L1 acquisition in that L1 grammar is the initial state for L2 or L3. Epstein, Flynn and Martohardjono (1996), on the other hand, assert that UG is the initial state for L2 and L3. Initial state discussions lead to two different models of language acquisition. The first one
proposes that UG becomes language specific grammar over time. UG and L1 are inseparable from each other. According to this view, UG is only fully available until L1 is fully acquired. The other view posits that UG is distinct from the language specific grammar and remains constant over time and is available continuously even in case of L2 or L3 learning. In this framework, there are four differing views relating to the accessibility to UG: complete access (or direct access), no access, partial access (or indirect access) and dual access view. In complete access, as supported by Flynn (1987), the essential language evidence in L1 acquisition is also critically involved in L2 or L3 acquisition. According to Flynn’s hypothesis, where the L1 and L2/L3 have very similar parameter settings, the pattern of acquisition of complex structures resembles later stages of L1 acquisition. On the other hand, where the parameter settings differ between the two languages, the pattern of acquisition resembles the early stages of L1 acquisition. Cook (1992) notes that in direct access paradigm, L2 learners learn exactly the same way as L1 learners; they set values for parameters according to the L2 evidence which they encounter without any other influence. Next, in no access view, supported by theorists such as Bley-Vroman (1996), “adult L3 learning is very different from L1 acquisition in that adult L3 learners resort to general learning strategies rather than UG to support language learning.” According to this theorist, “L2 learning varies so considerably across individuals because general learning strategies vary greater from person to person.” Adult L3 learners lack access to UG and the function of the UG is replaced with the general cognitive problem-solving mechanism utilized in general learning processes. In partial access view, however, learners may access to the linguistic principles of UG but not to the full range of parametric variations. Proponents of this view such as White (2003) assert that “learners can access to UG only through the L1. Finally, in dual access, as proposed by Felix (1996), adults continue to access UG but they also refer to general problem solving ways as proposed in no access view. According to Felix (1996), “this is inadequate for processing structures beyond elementary level of data and only UG can ensure complete grammatical competence, which is why most adults fail to achieve native-speaker level of competence.” In our opinion and from the discussions above, we will make use of the direct, or complete, and indirect, or partial, access models to explain the relationship between the UG and L2 or L3 grammar in our study. Learners of L3 make use of the common principles between L3 and their L1, but set parameters of L3 with the cognitive understanding of the setting of the parameters of L1. Therefore, it is essential for L2 learners to understand and recognize the parametric variations in their L1 and L3. As Swain and Lapkin (2000) put it, ‘To insist that no use be made of the L1 in carrying out tasks that are both linguistically and cognitively complex is to deny the use of an important cognitive tool.’

3. Multilingualism and Multiple Language Learning

Studies on multilingualism are generally carried out as individual or social multilingualism. Therefore, in order not to cause confusion, initially, it is necessary to make a distinction between societal and individual multilingualism. “A person can be called multilingual if on the basis of the knowledge of his/her mother tongue he/she has restricted knowledge in at least two further languages, either in the same or in different discourse areas” (Wilton, 2009). “Viewed as a societal phenomenon, multilingualism does not necessarily imply that all individual members of the group are multilingual, but that several languages are present within a certain society.” Accordingly, a multilingual society is composed of multilingual individuals or several monolingual groups, each of which speaking a different language (Wilton, 2009). In this study, we will concentrate on individual multilingualism resulting from multiple language learning (MLL). The notion that human being is equipped to learn more than one or more languages from birth introduces individual multilingualism as something natural (Tracy, 2007). “MLL very often refers to the learning of more than two languages in tutored instruction (third, fourth, etc. language learning), for which the term Third Language Acquisition (TLA) is often used” (Hufeisen & Jessner, 2009).
Studies on second language, third language, or foreign language generally claim that third language acquisition is different from second language acquisition. In the model illustrated in Fig.2 above, one can understand that L1 and L2 are exposed simultaneously, which may be called simultaneous learning of multiple first languages. However, purposive learning of additional languages as a second foreign language differs from L1 acquisition in that there is already available L1 or L1s in the mind. That is, second language and foreign language learners already know a first language when they start to learn a new language. Therefore, in order to dissipate this ambiguity and illustrate first, second and foreign languages more efficiently, we need to describe these concepts with new representations as to their way of acquisition at least for this particular study. Accordingly, by a first language (L1), we only mean native or mother tongue(s) acquired unconsciously. By a second language (L2), we mean a language(s) acquired unconsciously in a non-native environment following the first language(s). And by a third language (L3), we mean a foreign language(s) learned consciously and purposively through formal education or cognitive ways. This term generally refers to the learning of a second, third or fourth foreign language (= L3) in a natural context (Hufeisen & Jessner, 2009). A foreign language differs from the others in terms of acquisition processes. Whereas the natural acquisition of several languages from birth is usually the result of the environment of an individual, the formal learning of a foreign language is largely a conscious and purposive process (Bertrand & Christ, 1990). From these descriptions, it is understood that each category of languages is acquired or learned in different ways. That is, languages spoken by a multilingual individual are not classified as L1, L2, L3, L4,...Ln but as L1, L2, and L3 as to their quality of acquisition. As to the quantity of languages acquired or learned, on the other hand, each qualitative category may also contain multiple languages, which may be represented for multiple L1s as L1_1, L1_2, L1_3, L1_n etc. In case of multiple L2s, the representation will be something like L2_1, L2_2, L2_3, L2_n etc. As for multiple L3s, the quantitative representation of multiple successive languages learned will be illustrated as L3_1, L3_2, L3_3, L3_n etc. In consequence, illustration in Fig.3 cannot represent or illustrate L2 or L3 learning but simultaneous L1(s) acquisition. Another discussion in multiple language learning is whether the multilingual individual’s lexicon is stored in two distinct stores, one for each language, or as a single store including both languages, or as two separate stores. Considering the results obtained from transfer studies cited in this paper, it seems as if it is combined as also suggested by De Groot (2002). Which lexicon is expected to be preferred is almost like the preference of formal and informal language depending on the addressee. Then, the LAD model adapted to L3 acquisition and the relation between L3 and L1/L2 would be as the following:

<table>
<thead>
<tr>
<th>L3_1 Input</th>
<th>Initial State</th>
<th>Multiple Language Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>L1 Parametric values and lexicon</td>
<td>L3_1 parameter setting and lexicon, L1/L2 transfer</td>
</tr>
<tr>
<td></td>
<td>L2 Parametric values and lexicon</td>
<td>L3_1 parameter setting and lexicon, L1/L2 transfer</td>
</tr>
</tbody>
</table>

Figure 3. LAD extended to MLL

We understand from the illustration above that during L3(s) learning, both L1 and L2 linguistic data are processed as the prior linguistic knowledge and initial state for learning a new language and UG is not accessible. In addition, we also understand from Fig.4 that lexicon of different languages is stored in a single store as in the case of synonyms belonging to the same language. The preference of the lexicon depends on the addressee and the context.
4. Developing Strategies for Multiple Language Learning

Until recently, the relationship between L1 and the L2 was discussed in terms of negative effects of the learner’s first language on the new one. However, considering Cook’s (1992) description of the concept multi-competence, multilinguals possess a configuration that is distinct from that of bilinguals and monolinguals (Cenoz & Genesee, 1998). In a recent study, indeed, Hopf, McLeod, and McDonagh (2016) discuss the concept of linguistic multi-competence and point to the importance of individuals’ and communities’ total linguistic repertoire and competence in learning additional languages. Reporting her interesting experiences in Malaysia, Karchner-Ober (2012) reports that foreign language learning in Malaysia was much more difficult than expected when they were asked to refer to their previous language knowledge since they are not fully competent or proficient in any language, resulting in the condition called multilingualism. This condition may be regarded as clear evidence in explaining the important role of multilingual competence in learning new languages. According to Wilton (2009), the more languages are involved in a multilingual repertoire, the more likely is it that at least one of them is a non-native and often a foreign language, so studies investigating multilingualism do not ignore the effect of linguistic awareness. By linguistic awareness we mean the speaker knows the fact that in Turkish interrogative sentences the head complement is filled by ml. Jessner (2006) defines linguistic awareness in multilinguals as an emergent property of multilingual proficiency and as consisting of at least two dimensions in the form of cross-linguistic awareness and metalinguistic awareness. This conscious or unconscious knowledge was not allowed to be surfaced until about three decades ago. Existence of several languages in the mind started to be seen positively only after some studies demonstrating the success of bilinguals and multilinguals in learning a new language.

Multiple language learning scenarios can be listed as: simultaneous acquisition of L1/L2/L3, consecutive acquisition of L1>L2>L3, simultaneous acquisition of L2/L3, simultaneous acquisition of L1/L2 before learning the L3, and other subsequent languages (Hufeisen and Jessner, 2009). Recent studies show that during learning process, L2 takes over the role of bridge language even if L1 and the target language L3 are closer to each other than L2 and L3 (Hufeisen, 2000). Considering these scenarios, we can easily understand why in a bilingual or multilingual individual the proficiency level of the languages in the mind are almost never equal. One may be dominant over the other due to the factors such as earlier or later acquisition, level of prestige, frequency of use (Cenoz and Jessner, 2000). The more languages are involved, the more threatening the idea of confusion becomes: to many people the simultaneous acquisition of more than two languages will inevitably result in chaos, undesirable language mixing and inadequate language competence” (Wilton, 2009, p. 71).

Based on the theories of Initial State, Accessibility, and Principles & Parameters discussed above, it may be suggested that parameter setting, primary linguistic data, prior linguistic knowledge and lexicon are the fundamental elements in learning any language. Parameter setting is a kind of tuning which characterizes the linguistic properties of a language in a limited range. This limited range contains a limited number of binary structures, either of which is appropriate for any language. These structures are not learnt but already-built in structures (Chomsky, 1981). While principles, or general linguistic properties of languages, do not vary from one language to another; parameters between languages are set according to a limited number of structures, changing from one language to another in binary forms. In his later minimalist studies, Chomsky (1995) relates these concepts to grammatical learning (GL) and lexical learning (LL), which describes two ways of learning during a natural language acquisition process. While GL occurs as a comparison, discovery or modification process requiring exercises for a certain period of time, LL occurs as a memory and recording process requiring repetition and exposition for a certain period of time. Therefore, our strategies suggested for MLL focus on GL but not LL which requires frequent repetition.

The strategies through which multiple languages are used and learnt also require a special attention since multiple language learning is a relatively complex situation. Strategies for learning are the ways of learning a piece of linguistic knowledge independently of teachers. These strategies are generally natural reactions which occur during first or second language acquisition process. Considering all the
data obtained in this paper, it seems that multiple languages are not thought but learned. Either simultaneously or successively, for a long term or short term, a person may need or be exposed to a language temporarily or permanently. In this case, this purposive act of learning should require special learning strategies developed from acquisitional ideas of UG discussed in this paper as listed below:

- **Categorization:** This strategy is related to using a new vocabulary learned in an appropriate syntax and with appropriate morphemes. The learner categorizes new exposed lexicon into appropriate category having similar semantic, morphological and syntactical properties. For example, learners may group new vocabularies according to their functions.

- **Simplification:** Learners generally simplify complex structures such as irregular verbs or articles and generate regular inflections (e.g. using goed/ did go instead of went) or omits articles (using on table instead of on the table).

- **Transfer:** Depending on the properties of the target language, the learner refers to his linguistic repertoire and transfer grammatical or lexical elements from a similar linguistic system, which is usually the earliest L2.

- **Linguistic Awareness:** We should not be looking at languages in isolation but at the whole language system that we possess. For example, trying to put words into meaningful phrases based on prior linguistic knowledge:

  e.g. take, hope, this promotion (If Turkish syntax is transferred, the new syntax may be expected to be like this promotion taking hope)

- **Parameter Setting:** Based on the target language input, learners set target parameters: For example, for the example given above, this time learners may observe similar verb phrases in authentic written material or audio dictionaries, etc.

  e.g. “hope to take this promotion”, and s/he corrects his/her earlier trial this promotion taking hope, and sets the new head parameter as head-first instead of earlier head-last.

- **Matrix Model (or Code-Mixing):** According to strategy, the learner generates a matrix language, choosing the overall syntax and the morphemes from one linguistic system (especially from the target language), while choosing the vocabulary from another (especially from the reference language) (Myers-Scotton, 2002). For example the Turkish/English sentence: mak kapat o kapı (to close the door).

- **Code-switching:** Code-switching is switching instantaneously from one grammar to another, one lexicon to another, even one pronunciation to another (Muysken, 2000). It requires changing from one linguistic system to another during the same context. “Code-Switching is a normal ability of L2 users in real life situations and can be utilised even by children as young as two years old”, as is code-mixing (Genesee, 2003).

5. Conclusion

In this study on MLL, we tried to explain MLL process through early and late UG theories. Referring to initial state and accessibility discussions, we explained initial state of multiple foreign language learning. In addition, the descriptions such as first language, second language, third language, foreign language, multilingualism, multiple languages were clearly described and explained. In the study, the ‘process of learning a new language or new languages’ is described as ‘a lexical learning process’, a
system of storing (saving) knowledge in memory, including synonymous lexeme learning without requiring any grammatical explanation. Through the results obtained in the study, we arrived at the conclusion that during either simultaneous or successive learning of multiple languages, the lexicon is common for all the languages in the mind and parameter setting occurs between languages having similar linguistic properties. It is also understood that linguistic awareness as the initial state in MLL undertakes the function of LAD in L1 and L2 acquisition. Finally, multiple language learning strategies such as categorization, simplification, transfer, linguistic awareness, parameter setting, code-switching, and code-mixing suggested at the end of the study may guide learners not only for multiple language learning but also for foreign language teachers to provide efficient exercises and activities for their students. This is an important study not only for understanding L2 learning processes but also for understanding other language acquisition processes observed at any stage of life in terms of ‘lifelong learning’. Furthermore, another important contribution of this paper is that it is expected to contribute to ‘lifelong learning activities’, leading to a continual and pleasure learning not only for students but also for individuals at different ages.

References


