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A Problem of Second Language Acquisition: Adverbs and Verb Movement in English

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Introduction.

Italian students learning English as a second language are known to make some common mistakes. The aim of this study is to find possible reasons behind a specific error that Italian students often make: raising the English verb over the adverb.

The present study is based on three hypotheses:

1. Italian speakers will perform similarly as they would in L1 when positioning adverbs in an English sentence: they raise the verb beyond the vP;
2. Italian speakers will more likely raise the verb beyond the vP when the English verb presents a rich morphology (the past -ed);
3. First year students will perform differently than third year students.

Italian, unlike English, allows short verb movement to the TP. This characteristic was studied especially by Pollock (1989). Transfer of parameters from the learner's first language is observable in second language acquisition, this is applicable also to the verb movement parameter. Italian students, therefore, are likeable to transfer some parameters of their first language into the interlanguage (e.g. verb movement).

The first chapter of this study is an overview of the main theories regarding second language acquisition: the accessibility to Universal Grammar and the transfer of the first language into the interlanguage grammar. Moreover, an explanation of the U-shaped curve in first and second language acquisition is provided, as this study will compare the behaviour of second language learners on different stages of the acquisition process.

The second chapter deals with the role that morphology seems to have on short verb movement. Different theories regarding verb movement account for the presence of verb morphology as a trigger to verb movement, especially agreement morphology. The second paragraph of the chapter discusses verb movement in the context of second language acquisition and more precisely, the verb movement parameter reset in second language learners.

Finally, the third chapter presents the research that was conducted in order to answer the three hypotheses. A questionnaire was conducted across five classes of the course of Language, Literature and Cultural Communication at the University of Padova. The questionnaire investigated the placement of adverbs relative of verbs in English sentences in order to find out how Italian students move the English verbs. The results of the questionnaire are shown in chapter 3 and discussed in chapter 4.

Chapter 1. Second Language Acquisition

This chapter provides a brief overview of some of the main theories concerning second language (L2) acquisition: specifically, the role of Universal Grammar (UG) and first language (L1) in the second language acquisition process and an explanation of the U-shaped learning process.

1.1 The role of Universal Grammar and the first language in second language acquisition

When discussing second language acquisition, it is best to start from the "the initial state". This issue was not considered by linguists until the 1990s (White 2003), when different hypotheses on this topic started to develop.

Depending on how the nature of the initial state can be considered, the following steps in the acquisition process reveal a different outcome. If second language acquisition starts this process in the same way as first language acquisition, using only UG as a source in its initial state, the learner should acquire the second language in the same way as any other learner (irrespective of their first language). There are two main categories in which different hypotheses can be divided; the initial state can be UG constrained or first language constrained. The first option is supported by the theories both of Epstein, Flynn, Martohardjono (1996) and Platzack (1996). On the other hand, the hypothesis that L1 is the initial state of L2 acquisition is supported by Schwartz and Sprouse (1996) and Eubank (1994).

Schwartz and Sprouse theorise the Full Transfer Full Access hypothesis (FTFA), according to which the L2 learner's initial state is L1 (full transfer) but UG is fully accessible to adjust parameters in order to achieve the grammar of the target language (full access). Schwartz and Sprouse profess that an individual acquiring a second language would investigate UG whenever the L1 parameters cannot provide the correct solution for the L2, however this is not possible during the earliest stage of the acquisition process. This theory suggests that individuals of different L1 start acquiring the same L2 starting from a different initial state.

This theory is criticised by Yuan (2001) who investigates thematic verb raising in English, French and German-speaking individuals learning Chinese as a second language. In both English and Chinese, thematic verb raising is not allowed, whilst it is present in French and German. If the FTFA hypothesis was true, French and German speakers should perform verb raising in the earlier stages of Chinese acquisition, whilst English speakers should not. Yuan's experiments, nevertheless, illustrate that thematic verbs do not raise in Chinese second language acquisition; learners from different L1 behave in the same way. Yuan's experiment is mentioned in White (2003) also as a counterproof of the Valueless Features Hypothesis of Eubank (1994)

The Valueless Features Hypothesis states that L1 grammar is the initial state of L2 acquisition. This hypothesis differs from Schwartz and Sprouse's in measuring how L1 appears in the initial state. The Full Access Full Transfer hypothesis claims that the initial state consists in the entire grammar of L1; Eubank suggests that only parts of L1 grammar determines the initial state. According to this theory the only feature that does not transfer from L1 to the L2 initial state is strength

(hence called Valueless Features Hypothesis). Yuan's experiment (2001) provides evidence against this hypothesis. Chinese and English does not allow verb raising, therefore both have weak feature strength; on the other hand, French grammar permits verb raising. According to Eubank's hypothesis, learners should perform in the same way since the feature strength does not transfer from their L1; learners should raise the verb in same cases and keep it in situ in others - without showing a preference for any solution. The results contradict this hypothesis as most of the times learners do not raise the verb.

Other studies suggest the initial state of second language acquisition consists in the UG in its entirety, as previously mentioned. Epstein et al (1996) state that L1 does not play a part at the beginning of the acquisition, for this reason White (2003) refers to this hypothesis as the Full Access Without Transfer Hypothesis. Epstein highlights that L1 and L2 acquisition start in the same way; universal grammar is entirely accessible by learners.

A similar conclusion is given by Platzack's Initial Hypothesis of Syntax (1996). The initial state of L2 acquisition is the UG and all features are set on a weak value, irrespective of their first language. The learners will change the values of the interlanguage's[1] features based on L2 input. White (1991) provides evidence that L2 learners do not set their interlanguage's values as weak. In her experiment she shows how French speakers learning English as a second language tend to raise English verbs as they would do in their first language; they transferred the strong feature of L1 into their interlanguage.

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[1] Interlanguage is the term introduced by Selinker in 1972. It refers to the intermediate stage of an L2 learner whose knowledge of the target language is not fully native-like.

Epstein and Platzack's hypotheses do not differ completely from Schwartz and Sprouse's theory, as well as Eubank's. All the previous hypotheses suggest that L2 learners have somehow access to UG. Other studies, however, do not agree with this assumption. Bley-Vroman (1990) proposes the Fundamental Differences Hypothesis which finds in the native language the source for second language acquisition; the UG as a source is completely rejected. His theory anticipates that there will be no parameter resetting. Bley-Vroman's hypothesis is that L2 input and L1 grammar lead the process of second language acquisition. Although the Fundamental Differences Hypothesis is intended for adult foreign language it generally assumes that UG is no more accessible after L1 acquisition.

On the other hand, UG is claimed to be partially or fully accessible by other researchers, some of which are mentioned above (Schwartz, Sprouse and Epstein for full access, Eubank for partial access). The hypothesis of an accessible UG after first language acquisition can be proved if second language learners "demonstrate knowledge of subtle and abstract linguistic properties which could neither have been learned from L2 input alone nor derived from the grammar of the mother tongue" (White, 2003, p. 22). It is possible to see if UG constrains interlanguage grammars when the L2 presents different setting of parameters than L1 and the learner's performance applies to L2 grammar. Furthermore, the L2 input should be poor enough not to give clues to the learners on how the L2 grammar works on such parameters.

White (2003) presents some experiments which follow the above-mentioned conditions and can be used as evidence of UG constrained interlanguages. Kanno's experiment (1996) shows how English speakers learning Japanese as a second language have access to one of the UG principles (Empty Category Principle), implying that their interlanguage is UG constrained. The experiment investigates how native speaker and second language learners perform in evaluating Japanese case drop. In Japanese the accusative case particle /-o/ can be dropped for informal speaking; the nominative case particle /-ga/ cannot be dropped. English does not have case particles; the Japanese learner cannot retrieve the information about the case drop from their first language. Moreover, the L2 input would more likely lead the learner to overgeneralise the case drop to nominative particles as well as accusatives.

The test is presented to both Japanese native-speakers and Japanese beginners. It consisted in simple sentences constructed with dropped accusative and nominative particles. The test investigated the acceptance of each sentence (both grammatical and ungrammatical). The results showed no difference between Japanese native speakers and Japanese learners; both groups would accept only the accusative drop as grammatical. This experiment could be proof of accessibility to UG in second language acquisition.

Overall, it is possible to find different experiments that seem to prove every hypothesis mentioned above; presently the strongest hypothesis is that UG constrains interlanguage grammars. Further evidence supporting the accessibility to UG would be the absence of "wild" (White, 1989) or "rogue" (Thomas, 1991) grammars in L2 learners' interlanguages.

A "wild" grammar would present an error that "is impossible in the sense that it is prohibited by UG, not in the sense that it logically impossible" (White, 1989, p. 52). An example of which is provided by White (1989) from the following sentences:

a. What does Mary believe the story that John saw?

b. She watched television before Mary had dinner.

It seems that this kind of errors were never found in L2 learners' interlanguages. Studies on wild grammars were conducted especially on the binding principle (Finer, 1991; Finer & Broselow 1986). Finer and colleagues investigate this principle in Korean native speakers learning English as a second language. Interestingly the participants' performance was not coherent with their native language grammar nor with English grammar but allowed in other natural languages. Finer and Broselow (1986) presented pairs of pictures to six Korean native speakers who were asked to point to the correct representation of the sentences they heard (see figure 1 below). The sentences used in the experiment included both finite and non finite embedded clauses like the following sentences.

1. Mr Fat thinks that Mr Thin will paint himself

2. Mr Thin asks Mr Fat to paint himself

The results shows that Korean distinguish the clauses depending on whether they were finite or not. This is interesting firstly because "Korean appears not to have a grammatical distinction between tensed and infinitival clauses", secondly "English has no distinction between the binding patterns of reflexives in infinitives and tensed clauses" (Finer, 1991). The participant does perform as allowed by other natural languages. This outcome would be once again evidence that UG is accessible to L2 learners and that no wild/rogue grammars can yet be found in second language acquisition.
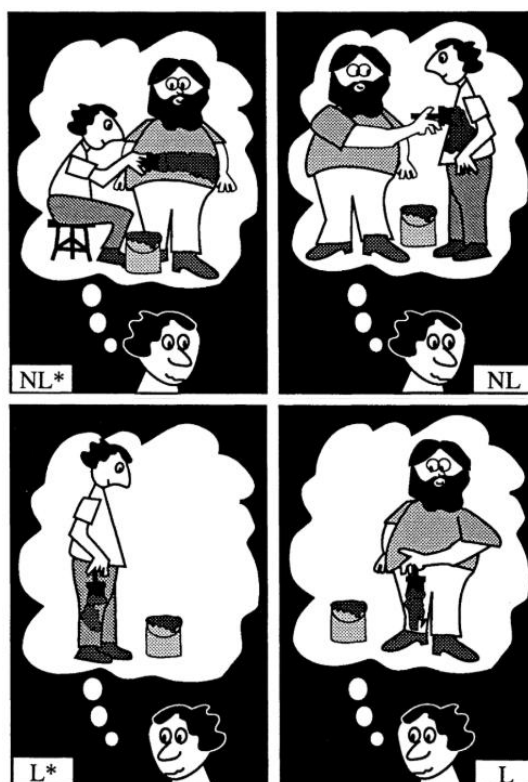

Figure 1: Mr thin and Mr Fat

In conclusion, as Felix points out: "if second language learners have knowledge of principles of Universal Grammar, why is it that UG does not work effectively in L2 acquisition as it does in L1 acquisition?" (Felix, 1995, p.149). The answer seems to be found in the first language which, if not in the initial state, must play

some role in the second language acquisition. According to Corder (1992), L2 learners strategically borrow from their mother tongue structures what they need until they gain a native-like grammar of L2. Moreover, the similarity between first language and second language facilitate the learner to acquire the target language grammar (the concept of typological similarity between L1 and L2 will be furtherly discussed in 1.2). What Corder implies is that L1 is used by the L2 learners as a source of help when they find themselves struggling in acquiring certain structures of the target language. A similar suggestion is given by Tanaka and Abe's Semantic Transfer Hypothesis (1985) which states that L2 learners – especially during the earlier stages – will transfer L1 equivalent lexical items into their interlanguage because of their incomplete knowledge of L2. The semantic transfer will therefore diminish as the learners are exposed to L2 input.

1.2 U-shaped learning

In first language acquisition one of the most interesting features that have been investigated is the possibility of a U-shaped learning process, i.e. "the appearance of a phenomenon, its disappearance and its subsequent reappearance" (Strauss & Stavy, 1982), see figure 2. It is possible to see this behaviour in different aspects of first language acquisition.

In the acquisition of morphology this pattern is clearly visible in English past tense learning (McNeill, 1970). In the first phase children perform past tense of common irregular verbs with their correct form ('came' not '*comed', 'ran' not '*runned' etc.). The second stage in the U-shaped learning is overregularisation; children

apply the regular -ed morph to every verb in past tense. The final stage is the adult-like grammar.
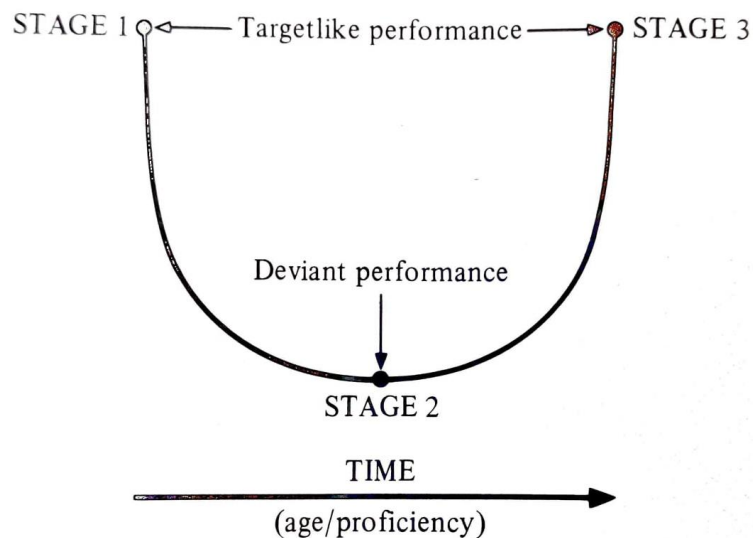

Figure 2: U-shaped behaviour (Kellerman, 1985)

This pattern is studied by Slobin (1968) in Russian child acquisition. In his study he investigates the acquisition of the instrumental cases. The first stage observes children applying the masculine and neutral suffix -om at every noun (even feminine). During a second stage, when the child learns about the feminine suffix (-oy) this is applied to every noun. Only at a later stage the child will start again to use -om. Slobin calls this overregularization pattern "inflectional imperialism".

The U-shaped curve in language acquisition is visible in syntax acquisition too. Chomsky (1969) investigates syntax acquisition in relation to the Minimal Distance Principle (MDP). This principle was introduced by Rosenbaum (1965) and deals with embedded clauses in English. Specifically, in English the noun

phrase in the embedded clause can be deleted when it is the same as the noun phrase in the main sentence, e.g. 'John promised to leave soon". According to MDP, the implicit subject of the embedded clause is the noun phrase closest to the embedded verb. This principle has some exceptions, such as Chomsky's experiment which is based on the hypothesis that children have difficulty acquiring constructions which are different from the norm.

In Chomsky's experiment children are given two figures (Bozo and Donald Duck). The interviewer asks the child to make the figures do different actions. At first the interviewer uses a sentence with the verb 'tell' as in:

1. Bozo tells Donald to hop up and down. Make him hop

The second sentence contains 'promise', a verb that uses a different word order than the one expected by the MDP.

2. Bozo promises Donald to do a somersault. Make him do it

The results of the test show four different stages. During the first stage, the child knows the MDP and applies it to all verbs, resulting in correct answers for the sentences with 'tell' but wrong answers with 'promise'. In the second stage the child recognises that the MDP does not work with all verbs. The result is an overgeneralisation that shows some errors with both 'tell' and 'promise'. The third stage is characterised by the realisation that 'tell' works well with the MDP but there is still uncertainty with 'promise'. In the fourth and final stage, the child acquires the correct constructions and performs well with both 'tell' and 'promise'. These results show a perfect example of the U-shaped curve in language acquisition.

The U-shaped behaviour is visible in second language acquisition too. Kellerman (1985) describes U-shaped behaviour of L2 learners through an experiment that investigates acquisition of English and German by Dutch speakers. Kellerman organises the second language acquisition process in three stages. The first stage is characterised by the successful performance of the target language by the learner. The second stage highlights how deviant the learner's performance is from the target language norm. Dutch speakers, for example, from the verb 'to break' they can initially distinguish the transitive and intransitive form ('he broke his leg' and 'the cup broke', respectively) and treat it differently in translations. During their second stage, learners' performance drops and 'to break' is seen mainly as a causative verb and not as an intransitive (see figure 3). It seems that the learners do not accept break as an intransitive because of the absence of an overt agent that needs to be in the sentence since "cups as a rule do not break by themselves" (Kellerman, 1985, p. 348). The learners show acceptance of 'break' as an intransitive only if a context is provided. Eventually, learners' performance increases again with the third stage.
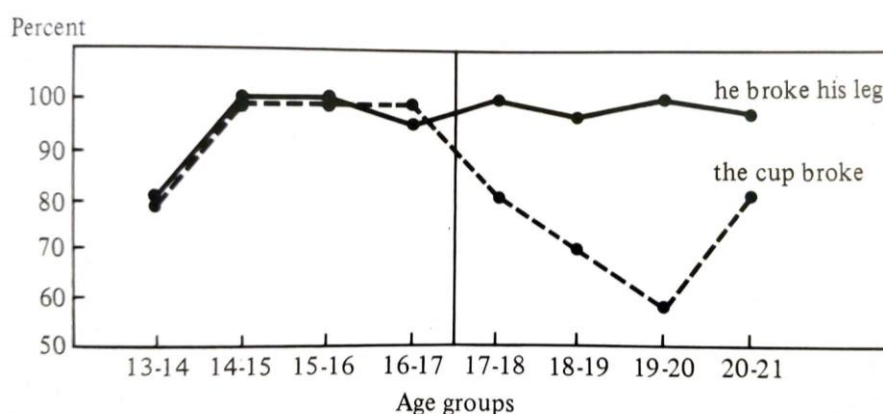

Figure 3: Performance on Transitive/Intransitive Break (Kellerman, 1985)

Kellerman explains his results: the learners appear to transfer L1 onto their interlanguage in a first stage. They then realise the difference between L1 and L2, which develops into the confusing results seen during the second stage, culminating in better performance during the third stage and thus conforming to L2 grammar.

According to Shirai (1990), Kellerman's experiment resulted in a U-shaped curve due to the transfer of the L1 only because of the typological similarity between the two languages (Dutch and English). Shirai's hypothesis is postulated based upon the results of his own experiment which investigates Japanese native speakers learning English as a second language.

In Shirai's experiment the participants are divided into three groups depending on the number of years that they have been studying English. The first group studied English for 3.8 years, the second group for 5.7 years and the last group for 6.8 years. The experiment focuses on the semantic meaning of the verb 'to put' and its acceptability in different sentences by the participants through a test called 'Meaning Potential Test'. The results show an overall linear improvement of performance from the first group to the third. The behaviour of each group is different in relation to each item, but it does not resolve into a U-shaped curve development. Shirai explains that the lack of a U-shaped curve in his experiment is therefore due to the distance between Japanese language and English. Moreover, Kellerman's experiment tests only 'positive transfer item' whilst Shirai investigates only a few positive transfer items (six out of twenty) that can be be translated with the lexical equivalent *'oku'*. Shirai's final suggestion is: "U-shaped behaviour in L2 lexical development tends to be observed for non-prototypical

'positive transfer' items when L2 learners learn a language typologically similar to their L1" (Shirai 1990, p. 6). The development of performance in cases like Kellerman's can be explained by the following diagram (figure 4):
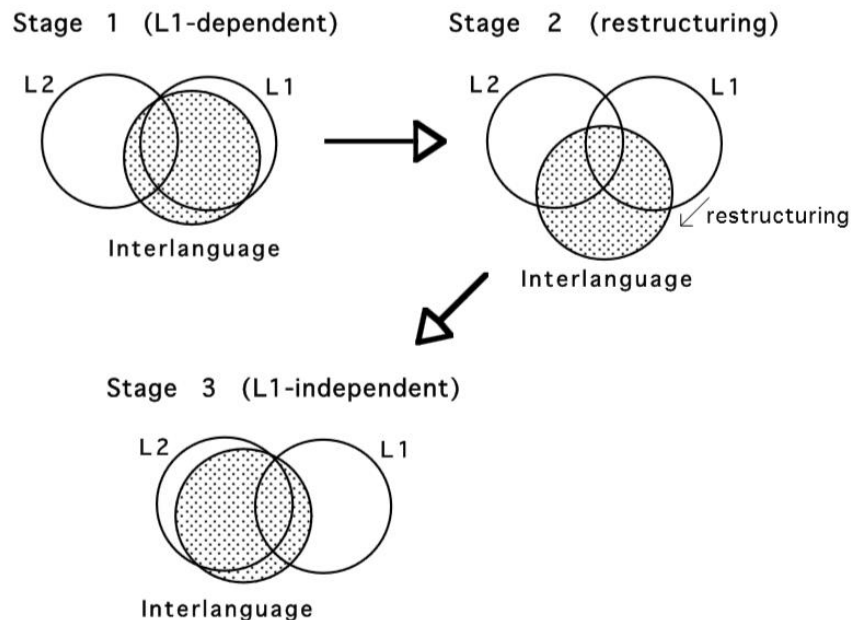

Figure 4: Three stages of U-shaped behaviour in L2 lexical development (Shirai, 1990)

The U-shaped behaviour is visible in different areas of second language acquisition and as Shirai highlights that it can be explained with more reasons depending on the context in which it is observed.

Another example of a U-shaped curve caused by the transfer of L1 features to L2 is shown in the results of Lightbrown's (1983) experiment. She investigates native French speakers learning English as a second language, in particular the acquisition of -ing. Her experiment shows how initially the learners overuse -ing as in French it covers also the present tense. Once the learners understand the difference between their L1 and the target language, the use of the -ing

decreases and then rises to a native-like use of language. Once again, this U-shaped behaviour can be reconnected to an initial L1 transfer and a consequent re-structuring of the interlanguage system to a target-like norm. Lightbrown's results can be reconnected also to an instructional reason: it appears that the learners were first taught the use of -ing and only later were presented with the present tense form.

Moreover, Lightbrown (2003) suggests that one of the reasons behind a U-shaped curve in performance might be "chunk learning". At earlier stages L2 learners might memorise certain structures as formulas without analysing their subjacent mechanism. As they deconstruct these formulas, learners will show a poorer performance and at later stages they successfully analyse structures of the target language thus their performances improve. Interestingly, this process is not too different from the U-shaped behaviour found in first language acquisition; the first phase is based on input followed by the second phase when learners start recognising the rules behind the language structures thence on to the third and final phase when learners show native-like grammar. Further evidence can be observed in Wode, Bahns, Bedey and Frank (1978) which observes child second language acquisition in a natural context. Their experiment demonstrated that a German child learning English as a second language went through a phase of overgeneralisation of the plural morphs similar to first language acquisition.

Overall, there is evidence to suggest that in some cases, L2 acquisition shows a U-shaped behaviour in the performances of learners, similar to L1 acquisitions

although in other cases, the origin of this behaviour has been suggested to stem from another source: the L1 transfer.

Chapter 2. Verb movement: the role of morphology and the parameter resetting in second language acquisition.

This chapter explains the role of morphology in verb movement by comparing the position of verbs with adverbs. The second paragraph provides an overview of the main theories concerning the parameter resetting of verb movement in second language acquisition.

2.1 Morphology triggering verb movement.

The relationship between morphology and syntax has always been an issue studied in linguistics. One of the most ground-breaking theories developed on this account is the Mirror Principle (Baker, 1985) in which is postulated the existence of a very close relationship between syntax and morphology. This is highlighted by the construction of passives, observed in the following examples given by Baker.

1. The cats chase the mouse every day

2. The mouse is chased by the cats every day

The two sentences say the same thing with two different structures. In the first sentence the noun phrase (NP) of the patient (the mouse) is given the role of direct object, in the second sentence the same NP covers the role of subject. Another difference in the two structures is the inflection of the verb in the second sentence with the morpheme -ed. As Baker says in his introduction of *The Mirror Principle and Morphosyntactic Explanation*: "any complete account of the passive

construction will have to encompass both aspects, the syntactic and the morphological". The Mirror Principle stipulates that the order of affixes of a word reflect the order of the syntactic rules applied. Affixation occurs, therefore through head-movements in the Tree of the syntactic structure. This close relationship between morphology and syntax is discussed further with verb movement, especially by Pollock (1989).

Romance languages are known to allow short verb movement, whilst it does not happen in Germanic varieties. Lexical verbs are found to be raised over the vP projection in languages like Italian and French, whilst English does not allow such movement. This syntactic movement can be analysed by studying other elements that do not move within the sentence, i.e. adverbs. Pollock (1989) assumes that adverbs are static and do not move inside the structure of the sentence. Moreover, he provides a ground-breaking theory by deconstructing the Inflectional Projection (IP) into a Tense Projection (TP), an Agreement Projection (AgrP) and adding the projection for negation (NegP), suggesting therefore a multi-layer structure for verbal phrases (figure 6).
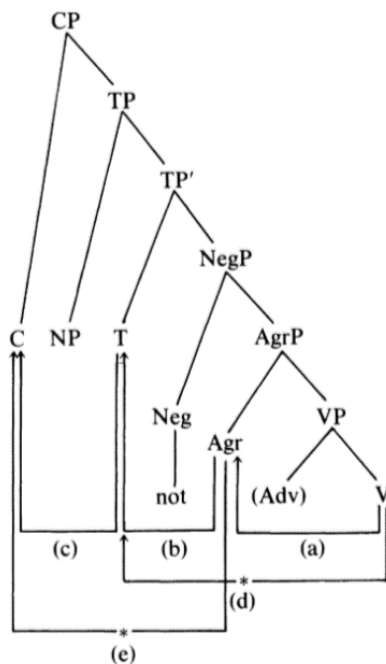
Figure 6: The structure of TP suggested by Pollock (1989)

Following Pollock's proposal, Cinque (1999) provides evidence that prove the universal and fixed order of adverbs. He suggests that adverbs themselves have distinct projections (as displayed in the figure below) in which each adverb is the specifier. In his study he proves the existence of a fixed and universal order that the adverbial projections follow in all languages (see figure 5).

Figure 5: The universal hierarchy of clausal functional projections (Cinque, 1999)

Subsequently, it is possible to analyse the movement of verbs by looking at adverbs. Given that adverbs are static, when they appear in different positions in a sentence it means that other elements have moved around them (i.e. verbs).

Pollock provides more on verb movement by investigating the differences between English and French. He suggests that the condition for verb movement is rich morphology. His proposal is based on the assumption that there is a connection between theta role assignment and verb movement. His analysis starts with a consideration: in English only the verbs 'be' and 'have' can move to IP (now TP). These verbs are the only ones that don't have to assign theta roles[2]. Subsequently, since English is characterised by a poor morphology, the only way for verbs to rise to TP is if they do not have to assign theta-roles. Other lexical verbs that do not stand this condition cannot move to TP because their morphology is not rich enough to assign to them theta-roles. According to Pollock, AgrP is 'opaque' in theta-role assignment in English because of the language's poor morphology, whilst AgrP is 'transparent' in French because of its rich morphology.

Consequently, Italian as a morphologically rich language allows verb raising. The order of English sentences will then be SAVO (subject, adverb, verb, object) as in: "Paola always eats pasta". Italian shows a different pattern, similar to French, SVAO (subject, verb, adverb, object) as in: "*Paola mangia sempre pasta*" (figure 7)*.*

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[2] Pollock bases his analysis on the theta criterion for which: "each argument bears one and only one θ-role, and each θ-role is assigned to one and only one argument" (Chomsky, 1981).
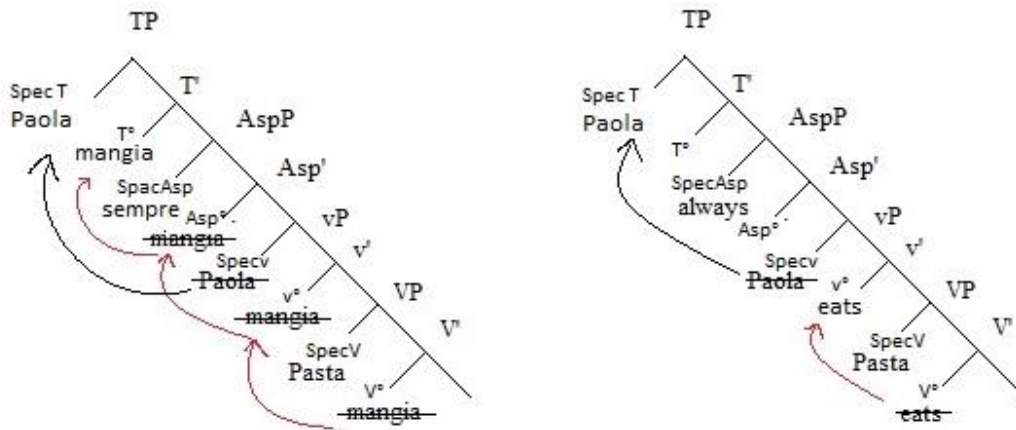
Figure 7: Syntactic representation of Verb Movement in Italian and English[3]

A problem was raised by Belletti (1990) in the analysis of verb movement in the Italian language. Italian is expected to behave in the exact same way as French, since in both morphology is rich although, as explained by Pollock (1989), French raises only finite verbs over the vP, yet it does not allow this movement for infinitives. Pollock's solution to this problem is establishing that the feature [-finite] is universally 'opaque', therefore infinitives cannot be raised in any situation. Despite this, as previously mentioned, Italian syntax raises infinitive verbs too. Belletti (1990) suggests that Italian has a different type of verbal inflectional morphology: some languages combine the verb roots with inflectional endings through verb movement, whilst others through Affix Hopping (a process in which inflectional features are lowered onto the verb in the syntactic structure). Affix Hopping is a controversial topic amongst linguists; whether it could be a valid

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[3] The Trees showed in figure 7 show a slightly different structure than Pollock's with the Aspect Phrase (AspP) and without the AgrP.

theory or not is debatable. Overall, it seems that the difference between the two languages lie in their overt structures and subsequently Italian allows verb movement in more situations than French.

Morphology as a trigger of Verb Movement is further developed by Vikner (1995) and Rohrbacher (1994) who indicate when an inflectional system can be accounted as [+strong] (i.e. rich enough to allow verb movement). Vikner suggests that the verb movement from V to T is allowed whenever person morphology is found in all tenses of a language. Rohrbacher instead formulates: "A language has V to I raising if and only if in at least one number of one tense of the regular verbs, the person features [1st] and [2nd] are both distinctively marked" (Rohrbacher, 1994, p. 108).

The hypothesis that morphology triggers verb movement is disputed by different studies. Bentzen (2003) provides empirical data of a Northern Norwegian dialect that presents the verb movement to T despite the poor morphology of the language. The dialect studied in his research shows neither person nor number distinct morphology in most verb types, yet verb movement is still allowed. Moreover, as Koeneman and Zeijlstra (2014) explain, generative linguistic models have postulated that morphology is added to words after the syntactic rules are applied, which would confute the hypothesis for which verb movement is triggered by morphology.

On the other hand, Bobaljik and Thráinsson (1998) propose another hypothesis that seems to validate generative models whilst observing in morphology, the cause of verb movement. The assumption made in their study is that languages

with multiple verbal morphemes have more functional projections, the presence of which trigger verb movement. Koeneman and Zeijlstra (2014) agree with the conclusion of Bobaljik and Thráinsson explaining how verb movement does not occur in some languages despite the rich morphology. Koeneman and Zeijlstra argue against evidence that disproves "Rich Agreement Hypothesis" (a term that refers to the hypothesis that rich agreement triggers verb movement). Bentzen's (2003) assumption regarding the Northern Norwegian dialect is further explained in the work of Wiklund, Hrafnbjargarson, Bentzen and Hróarsdóttir (2007) which shows how the finite verb can occur on the left of some adverbs, though highlighting that the verb cannot move across negation. The explanation proposed by Bentzen et al is that negation projection (NegP) appears above the Agreement Projection (as shown in figure 8).
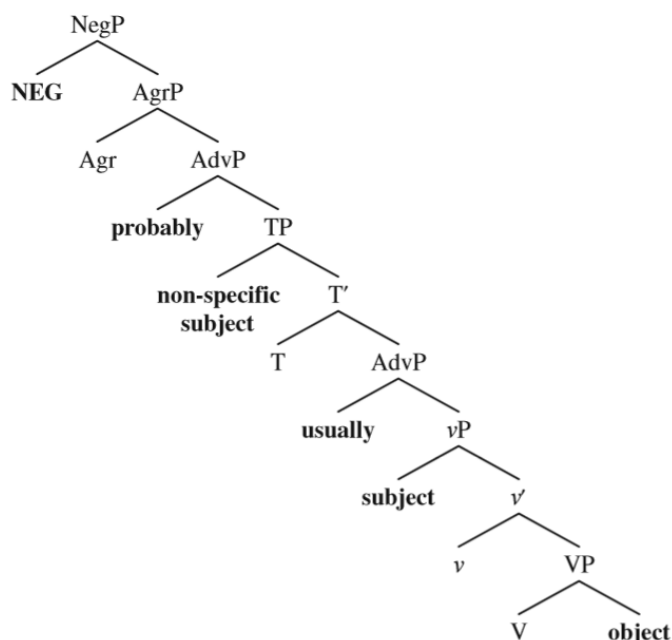

Figure 8: The structure of IP as proposed by Bentzen et al (2007, p. 206)

Koeneman and Zeijlstra argue that in this language, higher adverbs precede negation moreover, in Germanic languages, NegP scopes vP and it is found in a low position. Koeneman and Zeijlstra suggest that the verb does not leave the vP, hence it does not raise over negation. They further propose that the reason why the verb occasionally appears on the left of adverbs is that "adverbs can be base-generated in a vP-internal position and be adjoined to VP" (Koeneman & Zeijlstra, 2014, p. 15). They also contend that adverbs such as "probably" which should outscope vP, can go through the Quantifier Raising (QR)[4]. The Northern Norwegian dialect studied by Bentzen (2003) and Bentzen et al (2007) does not actually undergo the V to T verb movement, which implies that it cannot be used as an evidence against the Rich Agreement Hypothesis.

Whether rich morphology triggers verb movement is currently under discussion and can also be found in First Language and Second Language Acquisition studies.

2.2 Parameter resetting: the verb movement parameter in Second Language Acquisition.

Verb movement is discussed in Second Language Acquisition studies as a parameter that needs to be reset in L2 learners. Whenever the first language of L2 learners presents a different feature strength they will have to reset the feature of their interlanguage and allow or disallow verb movement to T.

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[4] The Quantifier Raising is the covert movement that quantifiers undergo in order to obtain a wider scope.

The parameter resetting in L2 learners is a widely discussed topic as it is argued whether or not L2 is UG constrained (see paragraph 1.1). Neeleman and Weerman (1997) argue that L2 has a construction-specific grammar, therefore it is not akin to a natural language thus there are no parameters. On the other hand, Beck (1998) proposes the Local Impairment Hypothesis for which only the feature strength is impaired in interlanguage grammar - a hypothesis that was previously assumed by the aforementioned Eubank (1994). The difference between Eubank's Valueless Features Hypothesis and Beck's Local Impairment Hypothesis is that the latter does not foresee any changes in the interlanguage grammar, hence the feature strength will always be impaired.

The authors claiming L2 is constrained by UG are split into two categories when discussing parameters resetting. Theories previously mentioned as the Full Transfer Full Access and Full Access Without Transfer fall into the category that assume a reset of parameters at some stage of the Second Language Acquisition process as UG is accessible in its entirety. Other authors claim that the parameter of L2 interlanguage will be set as they are in the learners' L1. Tsimpli and Roussou (1991) assume that the parametric variation depends on the values of functional categories and not on UG, which means that even if L2 is UG constrained it does not imply that the parameter resetting is available for L2 learners. They suggest L2 learners cannot acquire new functional categories nor their feature strength, resulting in a no parameter resetting hypothesis. Subsequently, the parameter setting in L2 grammar will be the same as the L1. Whenever the native language grammar cannot provide a good solution for the

L2 learners a transfer error will be observed, unless the learners decide to leverage the options available in UG. Hawkins and Chan (1997) follow the assumptions made by Tsimpli and Roussou and propose the Failed Functional Features Hypothesis: L2 learners can only acquire functional categories features which are present in L1. Muftah, Yahya and Eng (2014) provide evidence for the Failed Functional Features Hypothesis by investigating the acquisition of verb movement in English as a L2 by Arabic native speakers. Arabic is a [+strong] language as it allows verb movement over T. According to the results of Muftah et al, Arabic speakers fail to reset the parameter of verb movement as they raise the English verb over NegP even when the L2 learners are at an advanced level of English acquisition.

The hypothesis that L2 learners can reset parameters is supported by hypothesis like the Full Transfer Full Access and the Full Access Without Transfer which contend that as L2 learners have full access to UG they can acquire new features that are not present in L1,

White (1992) investigates the acquisition of English as L2 by French speakers and disproves the hypothesis put forward by Hawkins, Chan, Tsimpli and Roussou[5]. In White's experiment 97 children were tested, together with a control group of 29 English native speakers. She investigated the acquisition of both long and short verb movement dividing the L2 learners into two groups: group Q being given instructions on question formation whilst group A received instructions on

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[5] White's experiment was first presented in White (1991) as evidence that positive and negative instructions help L2 acquisition. In her 1992 work White proposed her previous experiment in order to prove that L2 learners have access to UG and to the IP structure proposed by Pollock (1989).

adverb placement. The tests were conducted both before and after the relative instructions were given to each group.

 The first test was an oral task in which each child was presented with 3 pictures. The interviewer had one of the pictures and the participant had to guess which one it was by asking questions in English. This experiment was chosen because it involved a spontaneous production of questions however some other types of questions might have not appeared in this test through lack of necessity. In order to overcome this problem White used a preference test in written form.

The second test was constructed with pairs of sentences that investigated questions formation and verb raising in respect to negatives and adverbs. Children were asked to indicate which of the sentences in each pair was correct. The results of the test conducted before the children were given any instructions are shown in graph 1, whilst the results of the test performed after the instructions are shown in graph 2.
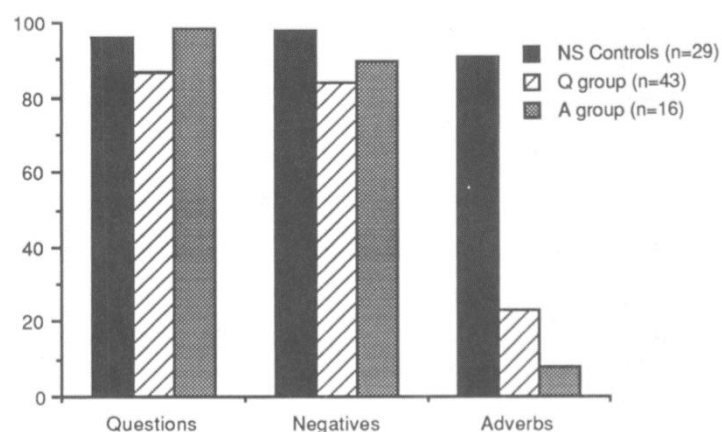
Graph 1: Accurate rejection of verb raising in percentage before instructions (White 1992, p.283)
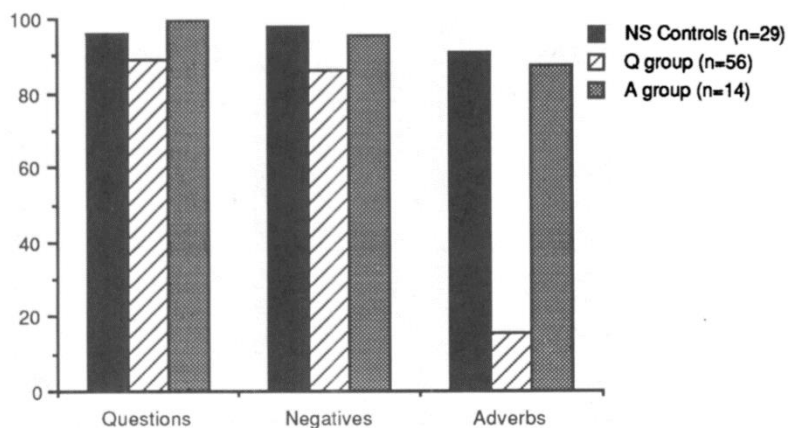
Graph 2: Accurate rejection of verb raising in percentage after instructions (White 1992, p.284)

As illustrated in the graphs, participants performed correctly on long verb movement. Moreover, the participants correctly did not raise the verb over the negatives, although they wrongly raised it over the adverbs. White (2003) explains the results of her experiment as a partial reset of parameters of L2 interlanguage. L2 learners successfully reset the feature strength in T as weak (the verb does not raise over NegP and it does not land on T°), whilst they fail to reset Agr as weak (they allow the verb to raise over the adverb and land on Agr°). The Failed Functional Features Hypothesis finds counterevidence in White's experiment which shows a (partial) reset of the parameter and the acquiring of a new strength feature of T in L2 learners.

In conclusion, White (1991) claims classroom input triggers the reset, as her results show a better performance after specific instructions on adverb placement were given to the children. This conclusion is disproved by Schwartz and Gubala-Ryzak (1992) who show how the improvement of performance after the children

were given explicit instructions was short-term. Moreover, in White's experiment the children were not given any examples of sentences with an intransitive verb followed by a prepositional phrase: S V Adv PP, e.g. "John walked quickly to the store" (Schwartz & Gubala-Ryzak, 1992, p. 17). Consequently, during the test the children did not allow the verb to be on the left of the adverb in this type of sentence. It would seem, therefore, that the classroom input does not affect the deep structure of the sentence: children simply overgeneralise the rules they are taught in class. Accordingly, White (2003) proposes that only positive evidence given by L2 input triggers parameter resetting in Second Language Acquisition and this is the strongest hypothesis present today, although it remains unclear why some parameters are reset later than others or reset only partially (as seen in White's 1992 experiment).

Chapter 3. The research

This chapter describes the current study. The first and second parts present the construction of the questionnaire and the relative changes that were made after the pilot test. The third part deals with the execution of the experiment and the problems that were subsequently found. The final part concerns the results obtained through the questionnaire.

3.1 Materials

The current study investigates the acquisition of English as a second language by Italian university students. The foundation of this study is based upon three hypotheses:

4. Italian speakers will perform similarly as they would in L1 when positioning adverbs in an English sentence: they raise the verb beyond the vP;

5. Italian speakers will more likely raise the verb beyond the vP when the English verb presents a rich morphology (the past -ed);

6. First-year students will perform differently than third-year students.

Firstly, the adverbs chosen to be into the questionnaire should not be ambiguous: their position is the same in both British-English and American-English; the position is therefore static. Secondly, the verbs chosen were lexical verbs whose past tense presents the regular -ed suffix. Thirdly and finally, the adverbs chosen had to be acceptable with different verb tenses as both present, simple past and present perfect tenses were tested.

The first adverbs chosen to investigate were 'normally' and 'always'. The questionnaire contained a total of 48 sentences (half with 'normally' and half with 'always') plus 20 fillers. The sentences chosen presented half intransitive and half transitive verbs. The structure of the sentences can be observed in figure 9.
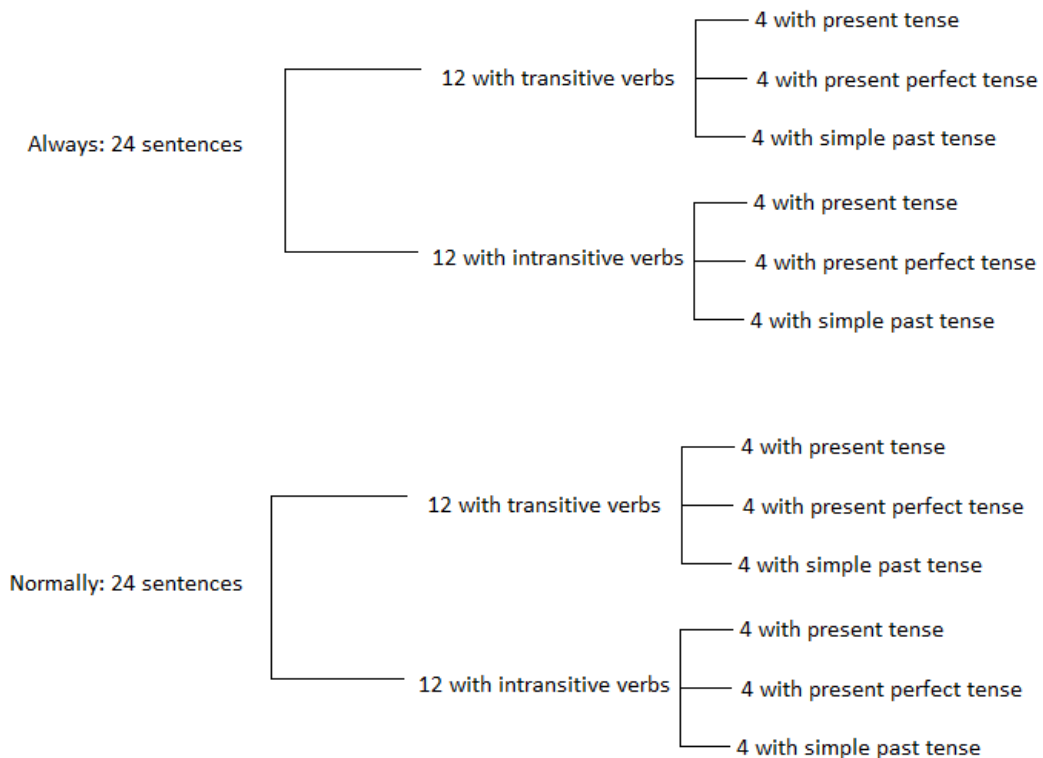
Figure 9: Sentences present in the study's questionnaire

The sentences that presented a transitive verb were constructed with a direct object and an adjunct, whilst those with an intransitive verb were presented with just an adjunct.

Four British English native speakers[6] were questioned in order to accomplish native-like written sentences. In the questionnaire the sentences were randomly

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[6] All four British English speakers were from the area of South Gloucestershire in the south-west of England and they were 23, 26, 54 and 64 years old.

placed[7] and were written without placing the adverbs within the sentence. The adverb to be used in each sentence was suggested on the right end in brackets. Each constituent of the sentences was preceded and followed by an underscore (_) which highlighted the possible adverb position. The sentences were as follows:

1. _Susan and Matt__talked__on the phone_   (*always*)

Before the actual questionnaire was issued, participants were asked to compile a personal information document, indicating the criteria necessary for participation in the present study. The prerequisites were:

- The participant must be an Italian native speaker
- The participant must not be bilingual (dialect was not considered)
- The participant has not attended a bilingual school at any point during their educational career
- The participant has not spent more than 6 months in an English-speaking country

The directions on how to compile the questionnaire were written in Italian in order to make them as understandable as possible by the participants. The English lexicon used in the sentences was as simple as possible for the same reason (to avoid any semantic difficulties).

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[7] The random order was obtained through the website Random.org.

3.2 The Pilot Test

The questionnaire was firstly tested on four students with the purpose of looking for any errors in the construction. Two of the participants were first-year students of the bachelor's degree course of Language, Literature and Cultural Communication at the University of Padova, the other two were third-year students of the same course. The questionnaire was handed out to each student individually on different days. The participants took around 10 to 15 minutes to complete the questionnaire.

The results of the pilot test showed a problem with the construction of the questionnaire. The total items analysed were 192; students made the correct choices 155 times resulting in a total of 37 errors. The problem in these results was the nature of the errors. The students placed the adverb 'normally' at the end of the sentence 5 times and at the beginning of the sentence 17 times. Subsequently, the four English native speakers were questioned regarding the acceptability of the adverbs at the beginning and at the end of a sentence. Ultimately, only 'normally' seems acceptable both at the initial and final position.

The solution chosen to overcome a problem of ambiguity of the results was to delete the underscore at the beginning and at the end of the sentence: the adverb cannot be placed in the initial and final position.

3.3 The procedure

The final version of the questionnaire[8] was handed out to three classes of first year students of the bachelor's degree course of Language, Literature and Cultural Communication at the University of Padova and to two classes of third year students of the same bachelor's degree course. The total of participants was 302, of which 159 were first year students and 143 were third year students.

The questionnaire was handed out at the end of lectures. The students were given approximately 30 minutes to compile the questionnaire (the time estimated from the pilot test was 20 minutes). The professors responsible for the lectures as well as the researcher ensured that the students filled the questionnaire independently of any assistance. The instructions of the questionnaire were as follows:

> *Il questionario consiste in 68 frasi incomplete. A fianco di ogni frase troverà tra parentesi un avverbio che deve essere inserito nella frase per poterla completare. Segni con una crocetta nello spazio indicato da __ la posizione che ritiene corretta per l'inserimento dell'avverbio. Nel questionario troverà frasi come:*

> (The questionnaire consists of 68 incomplete sentences. On the right side of each sentence you will find in brackets, an adverb, which needs to be placed in the sentence to complete it correctly. You can cross or tick above one of the underscores where you believe the adverb should be placed. In the questionnaire you'll find sentences like the following)

> Matt__has__washed__the plates__after dinner *(always)*

> Simon__played__the piano__at his party   (*normally*)

> The students__have__finished__their homework   (*normally*)

The researcher was available to answer any of the participants' questions at any point during the completion of the questionnaire.

During the analysis phase it was clear that one problem had not been taken in consideration. If 'normally' was acceptable at the end of sentence it was acceptable also after the direct object and before the adjunct. It was thus decided to not consider the adverb 'normally' and to restrict the analysis to 'always' in order to avoid too many ambiguities in the analysis of results. In the end the sentences chosen to analyse were the following:

1. Matt and Simon always watch the television on Sundays

2. My friends always change plans at the last minute

3. Susan always joins her boyfriend for lunchtime

4. The students always use their laptops in class

5. Laura always smiles at me

6. My cat always sleeps on the sofa

7. Susan and Laura always talk for hours

8. My parents always disagree with me

9. Susan has always finished her homework on time

10. Simon has always invited Matt to his parties

11. My parents have always decorated my house during Christmas

12. Laura has always planned her week in advance

13. Laura has always showered in the morning

14. Susan has always stayed in her room after dinner

15. My friends have always travelled in the summer

16. Simon has always lived in Newcastle

17. Laura always used her tablet in class

18. My friends always followed the leader of the group

19. Matt always played football at the weekend

20. Susan always called Laura after a date

21. Susan and Matt always talked on the phone

22. Laura always walked in the morning

23. It always snowed in the winter

24. My parents always travelled on their holidays

3.4 The results

Out of the total, 82 questionnaires were not evaluable (of which 42 were from first year students and 40 from third year students) either because they did not meet the conditions mentioned in paragraph 3.1 or because some of the answers were left blank. The questionnaires evaluated were 220, 117 of first year students and 103 from third year students. The two groups will now be referred to as group 1 (G1) for first year students and group 2 (G2) for third year students.

The sentences analysed were 24 for each participant ('normally' was not considered as previously mentioned). In total the items analysed were 5280 (2808 of G1 and 2472 of G2). The data collected through the questionnaires was organised on Microsoft Office Excel into 7 columns as follows (see figure 9):

1. *Partecipante* (participant). The number of the participant.

2. Item. The number of the item.

3. *Gruppo* (group). The group to which the participant belonged

4. *Frase* (sentence). The whole sentence to which each item corresponded.

5. *Tempo* (tense). The tense of the verb of the relative sentence.

6. *Posizione* (position). Whether the answer given by the participant was correct (1) or wrong (0).

7. *Posizione avverbio* (position of the adverb). The specific position where the adverb was placed by the participant. Each position was indicated with an acronym. The acronyms used in the last column were pV (*prima del verbo,* before the verb), pPart (*prima del participio*, before the participle), dV (*dopo il verbo,* after the verb), dOgg (*dopo l'oggetto*, after the object).

partecipanti	item	gruppo	frase	tempo	posizione	posizione_avv
1	1	1	Matt and Simon always watch the television on Sundays	present	1	pV
1	2	1	My friends always change plans at the last minute	present	1	pV
1	3	1	Susan always joins her boyfriend for lunchtime	present	1	pV
1	4	1	The students always use their laptops in class	present	1	pV
1	5	1	Laura always smiles at me	present	1	pV
1	6	1	My cat always sleeps on the sofa	present	1	pV
1	7	1	Susan and Laura always talk for hours	present	1	pV
1	8	1	My parents always disagree with me	present	1	pV
1	9	1	Susan has always finished her homework on time	presperf	1	pPart
1	10	1	Simon has always invited Matt to his parties	presperf	1	pPart
1	11	1	My parents have always decorated my house during Christma	presperf	1	pPart
1	12	1	Laura has always planned her week in advance	presperf	1	pPart
1	13	1	Laura has always showered in the morning	presperf	1	pPart
1	14	1	Susan has always stayed in her room after dinner	presperf	1	pPart
1	15	1	My friends have always travelled in the summer	presperf	1	pPart
1	16	1	Simon has always lived in Newcastle	presperf	1	pPart
1	17	1	Laura always used her tablet in class	past	1	pV
1	18	1	My friends always followed the leader of the group	past	1	pV
1	19	1	Matt always played football at the weekend	past	1	pV
1	20	1	Susan always called Laura after a date	past	1	pV
1	21	1	Susan and Matt always talked on the phone	past	1	pV
1	22	1	Laura always walked in the morning	past	1	pV
1	23	1	It always snowed in the winter	past	1	pV
1	24	1	My parents always travelled on their holidays	past	1	pV

Figure 9. Microsoft Office Excel table example.

Somma di posizione	Etichette di colonna								
	⊟1			1 Totale	⊟2			2 Totale	Totale complessivo
Etichette di riga	past	present	presperf		past	present	presperf		
1	8	8	8	24					24
118					7	8	8	23	23
Totale complessivo	8	8	8	24	7	8	8	23	47

Figure 10: example of Pivot Table showing the correct and wrong answers.

Count of posizione_avv	Etichette di colonna					past Totale	⊟present				present Totale	⊟presperf				presperf Totale	Totale complessivo
	⊟past			⊟2	2 Totale		⊟1 1 Totale	⊟2 2 Totale				⊟1 1 Totale	⊟2 2 Totale				
Etichette di riga	pV	⊟1 1 Totale	pV	dV		pV	pV			pPart	pPart						
1	8	8				8	8	8			8	8	8			8	24
118			7	1	8	8			8	8	8			8	8	8	24
Totale complessivo	8	8	7	1	8	16	8	8	8	8	16	8	8	8	8	16	48

Figure 11: example of Pivot table showing the placement of the adverb.[9]

The table was reorganised afterwards through two Pivot Tables, one looking at the correct or wrong answers of the participant (figure 10), the other focusing upon the specific positions where the adverbs were placed (figure 11).

The data obtained through the Pivot tables were then summarised in the following graphs. In graphs 5, 7 and 9 the percentages were calculated over the total amount of mistakes made by each group with the relative verb tenses (present, past simple and present perfect).

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[9] The examples displayed by figure 10 and 11 show the result of the first participant of G1 and the first participant of G2.

PERCENTAGE OF TOTAL ERRORS

11.97

7.8

PERCENTAGE

G 1

G 2

GROUPS
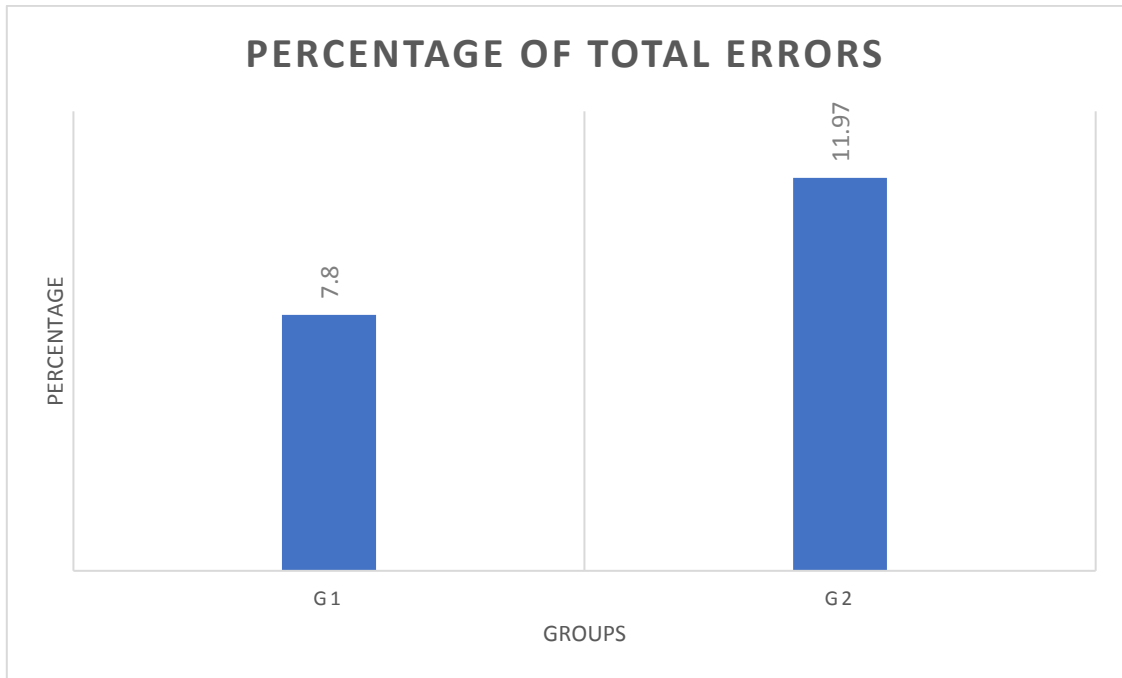
Graph 3: Percentage of total errors made by G1 and G2

The graph 3 shows the total mistakes of G1 and G2 in percentages. G1 placed the adverb wrongly in 219 items out of 2808 (7.8%); G2 made mistakes in 296 items out of 2472 (11.97%). G2 performed slightly worse than G1.
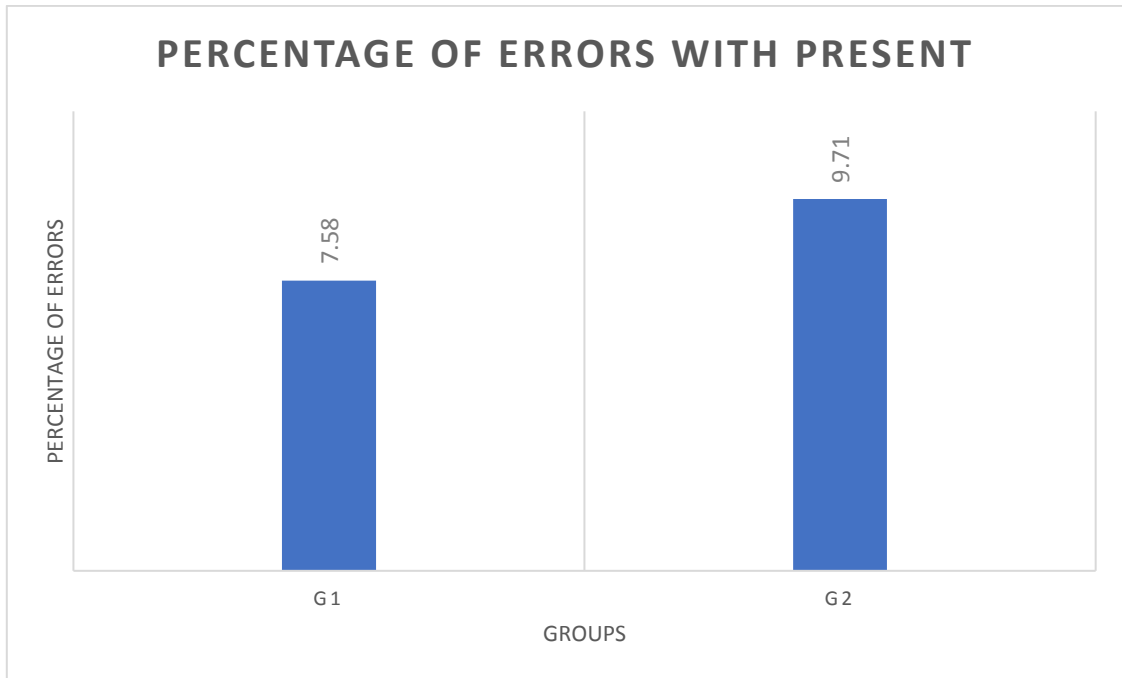
Graph 4: Percentage of errors made by G1 and G2 with verbs in present tense

Graph 4 displays the percentage of errors that G1 and G2 made with sentences that contained a verb in the present tense. Once again it is possible to observe a marginally worse performance of G2. G1 made 71 mistakes out of 936 items (7.58%), whilst G2 made 80 mistakes out of 824 items (9.71%).
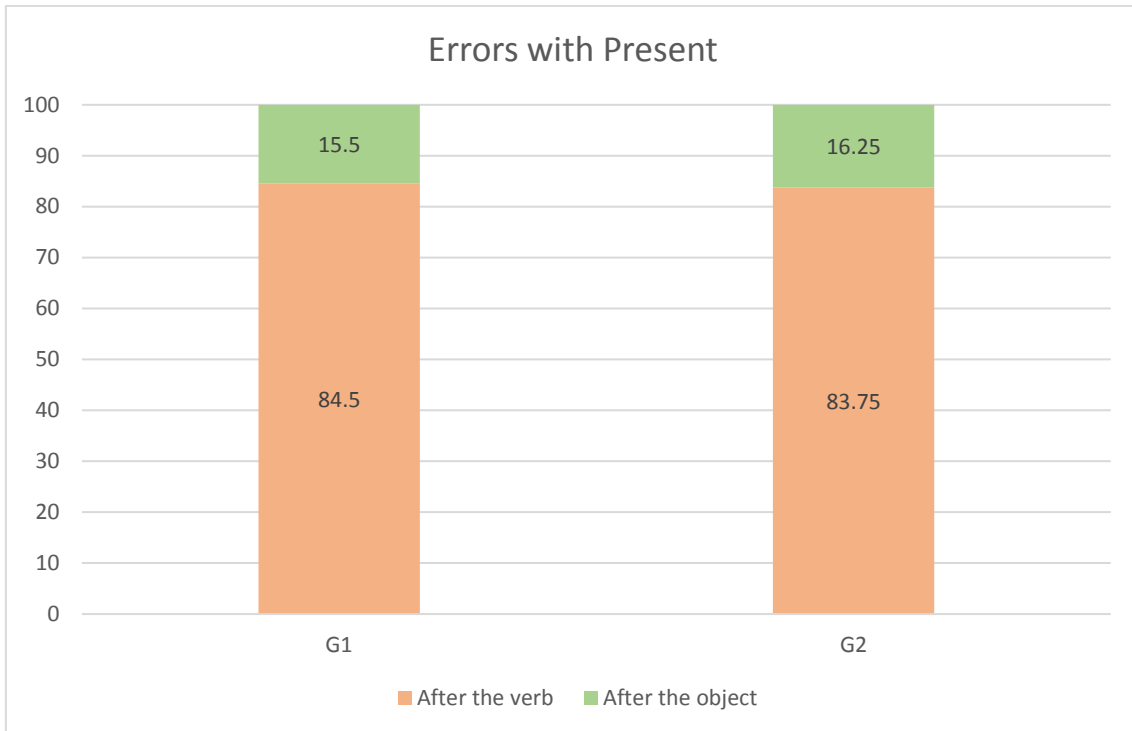
Graph 5: Types of errors made by G1 and G2 with verbs in present tense

Graph 5 shows the specific types of mistakes that G1 and G2 made regarding sentences with a verb in the present tense. The mistakes they could have made were placing the adverb after the verb or after the object (in sentences with transitive verbs). In the results placing the adverb after the object was considered an error even if this is not completely wrong in English. This issue will be furtherly developed in Chapter 4.

Overall, G1 and G2 percentages are nearly the same. The adverb was placed after the verb 60 times by G1 (84.5%) and 67 times by G2 (83.75%). The adverb was placed after the object 11 times by G1 (15.5%) and 13 times by G2 (16.25%). The sentences that presented the higher number of adverbs placed after the verb were number 2,4,5 and 6:

    25. My friends always change plans at the last minute

7. The students always use their laptops in class

8. Laura always smiles at me

9. My cat always sleeps on the sofa

G1 placed the adverb 11 times after the verb in sentence 2 and 6 times in sentence 4. G2 placed it after the verb in all the sentences above, specifically, 12 times in sentence 1 and 2, 11 times in sentence 3 and 13 times in sentence 4. Both groups seem not to behave differently when the verb presented the third singular person morpheme -s. The groups seem to not differentiate neither whether verbs were transitive nor intransitive.

PERCENTAGE OF ERRORS WITH PAST SIMPLE
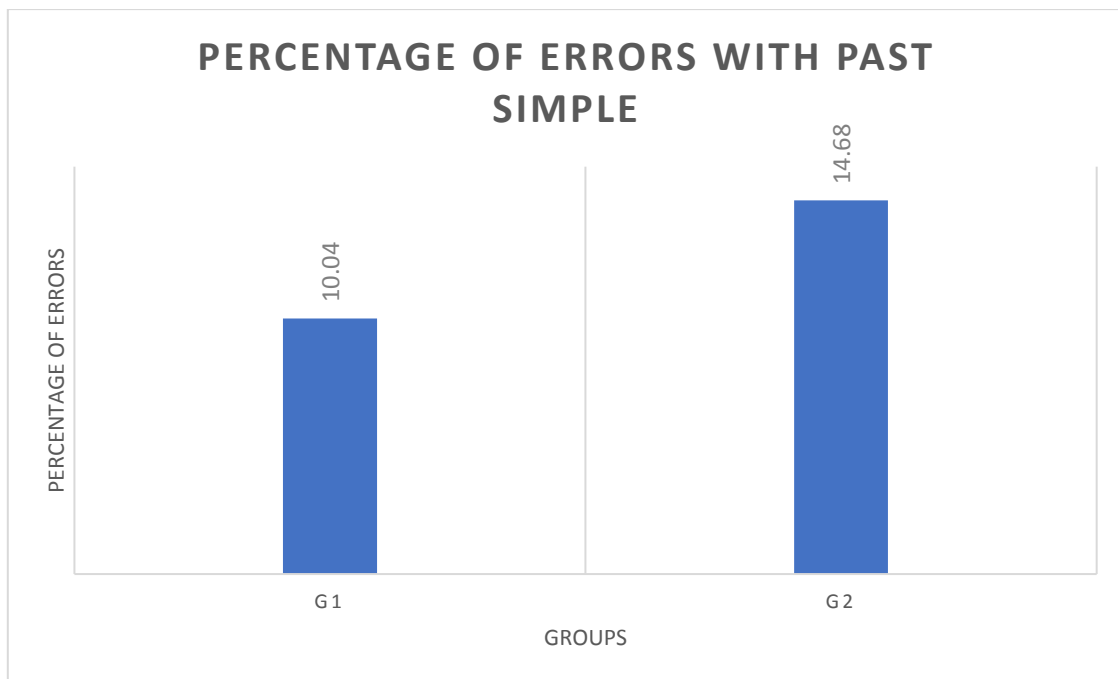
Graph 6: Percentage of errors made by G1 and G2 with verbs in past simple tense

Graph 6 presents the total of errors (in percentages) made by G1 and G2 in sentences that contained a verb in simple past tense. Once again, G2 performed slightly worse than G1. G1 made 94 mistakes out of 936 items (10.04%), whilst

G2 wrongly placed the adverb in 121 items out of 824 (14.68%).

Errors with Past Simple

Graph 7: Types of errors made by G1 and G2 with verbs in past simple tense

The types of errors that G1 and G2 made were mostly the same. The percentages showed in graph 7 are in fact similar in the two groups. Graph 6 shows the percentages of times that G1 and G2 placed the adverb after the verb and after the object in sentences with a verb in past simple tense. G1 placed the adverb 79 times after the verb (84.04%) and 15 times after the object (15.96%). G2 placed the adverb 102 times after the verb (84.3%) and 19 times after the object (15.7%). The groups seemed not to distinguish between intransitive and transitive verbs; the sentences in which the adverb was mostly placed after the verb were number 17, 18, 21 and 22 (the first two contain a transitive verb, the last two an intransitive verb):

17. Laura always used her tablet in class

18. My friends always followed the leader of the group

21. Susan and Matt always talked on the phone

22. Laura always walked in the morning

Specifically, G1 placed the adverb after the verb mostly in sentence 17 (17 times), 21 (13 times) and 22 (15 times), whilst G2 placed it mostly in sentence 18 (16 times), 21 (25 times) and 22 (16 times).
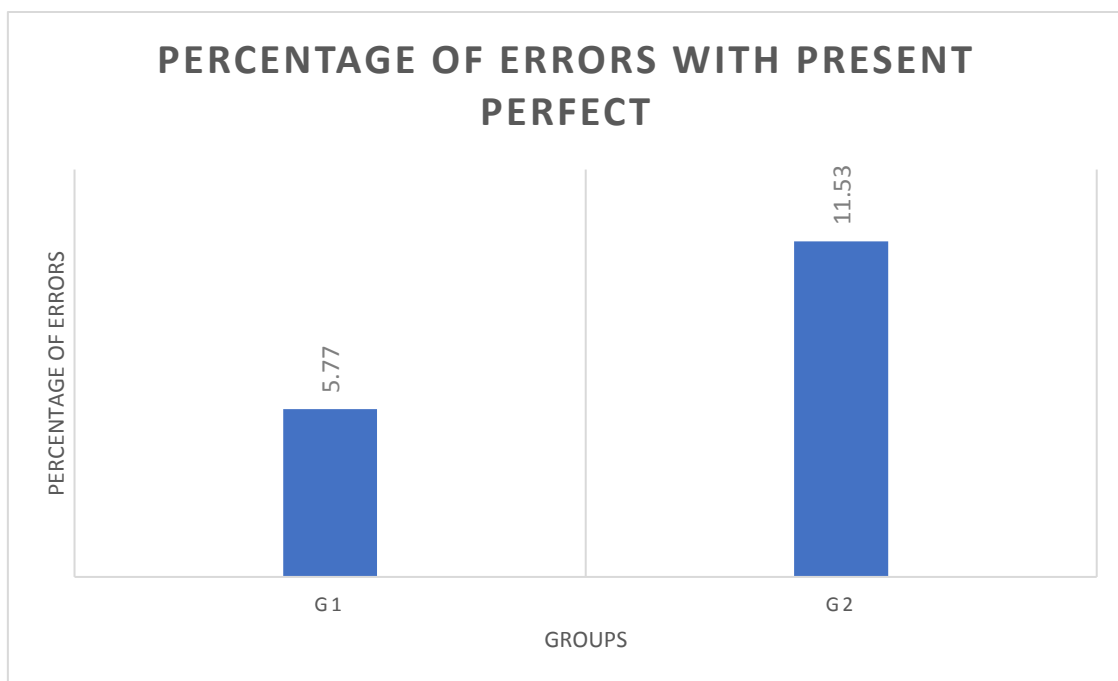
Graph 8: Percentage of errors made by G1 and G2 with verbs in present perfect tense

Graph 8 illustrates that percentage of errors that G1 and G2 made in sentences with a verb in present perfect tense. These results show a large difference between the two groups, G2 percentage almost doubles G1. G1 made 54

mistakes out of 936 items (5.77%), G1 made 95 mistakes out of 824 items (11.53%).
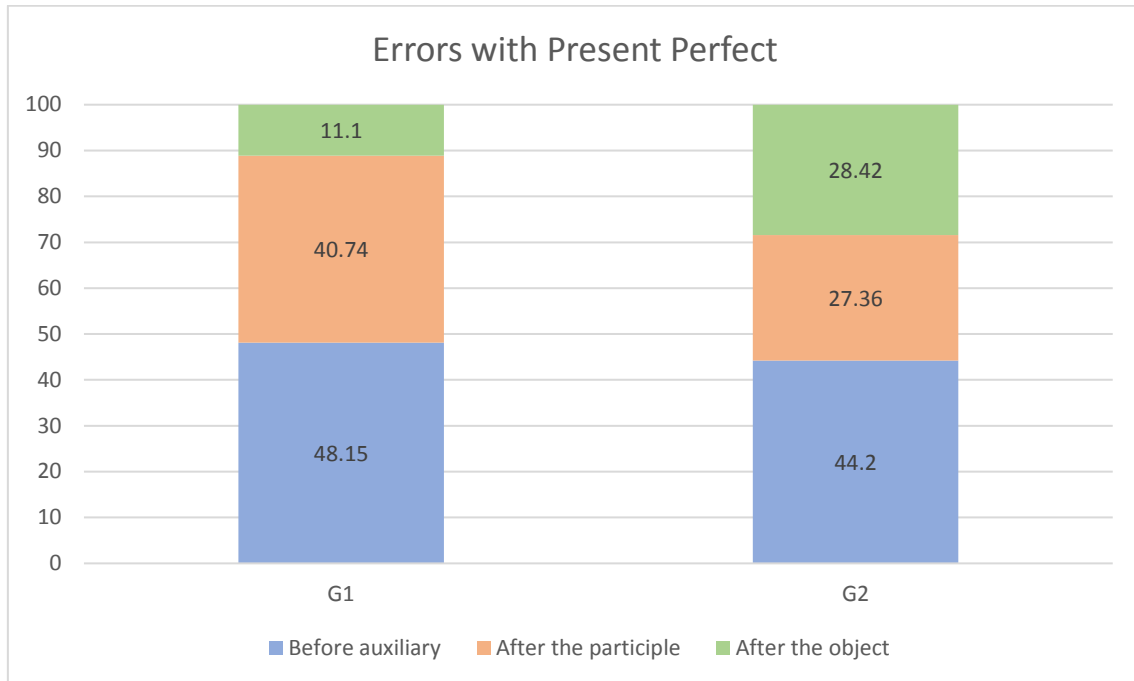
Graph 9: Types of errors made by G1 and G2 with verbs in present perfect tense

Graph 9 shows a slight difference between the two groups in the types of errors they made with verbs in the present perfect tense. Out of the total of errors, G1 placed the adverb 26 times before the auxiliary verb (48.15%), 22 times after the participle (40.74%) and 6 times after the object (11.1%). On the other hand, G2 placed the adverb 42 times before the auxiliary verb (44.2%), 26 times after the participle (27.36%) and 27 times after the object (28.42%). The groups made mistakes in all the sentences that presented the verb in the present perfect without showing preference for any specific item.

PERCENTAGE OF ADVERBS PLACED AFTER THE VERB
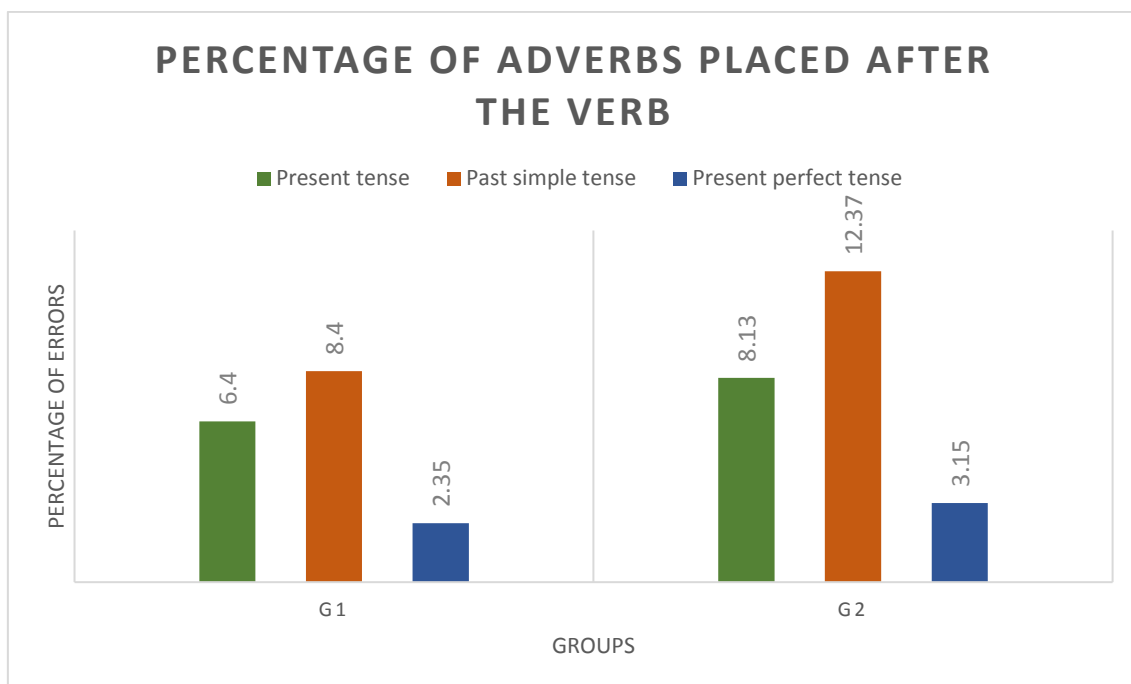
Graph 10: A comparison of the percentage of adverbs placed after the verb in each verb tense

Graph 10 displays the percentage of times that adverbs appeared after the verb in each verb tense (in the present perfect tense 'after the verb' is to be intended as 'after the participle'). The graph compares the performance of the two groups and shows a slightly higher percentage of adverbs after the verb in G2 (especially regarding the past simple tense). The percentages were calculated out of the total of sentences that contained each verb tense (for G1 each verb tense was in 936 items, for G2 each verb tense was in 824 items). G1 placed the adverb after the verb 6.4% of the times with verbs in present tense, 8.4% with verbs in past simple tense and 2.35% with verbs in present perfect tense. G2 placed the adverb after the verb 8.13% of the times with verbs in present tense, 12.37% with verbs in past simple tense and 3.15% with verbs in present perfect tense.

Chapter 4. Discussion of the results

The first observation that can be made from the results of the questionnaire is that overall the students perform very well. The percentage of errors is very low, especially considering that putting the adverb after the direct object is not a real mistake. Initially, the four English native speakers did not accept sentences with the adverb 'always' after the object but on a second analysis and by using a different tone (i.e. focusing) they confirmed it to be an option. The native speakers preferred placing the adverb before the verb as it sounded more 'natural', although they did not reject the possibility of placing it after the object in order to put the focus on the adjunct that occurs after the object. For example, in the sentence number 2:

2. My friends change plans at the last minute

The four native speakers placed the adverb in front of the verb but, when asked about the acceptability of "my friends change plans **always** at the last minute", they accepted it as a focus on the adjunct "at the last minute".

Considering the placing of adverbs after the object a correct answer, it is still possible to see some mistakes in the students' performance. Graphs 5 and 7 show that out of the total errors that G1 and G2 made with each verb tense, the majority made mistakes involving placement of the adverb after the verb (graph 9 shows some different results that will be discussed later in this chapter). Accordingly, it is possible to make some observations.

According to Pollock (1989), morphology triggers verb movement and languages

with a rich verb morphology (like Italian) will raise the verb over the vP. Italian is, therefore, a language that allows verb movement whilst English does not. Moreover, according to the Rich Agreement hypothesis, verb movement should be triggered when the verb presents number morphology. In the present tense English verbs have morphology only with the third singular person (-s), which according to Rohrbacher (1994) is not enough to trigger verb movement. Verbs should show different morphology for first and second persons, although, verb movement might be triggered in L2 learners when they notice morphology because of L1 transfer. If L2 learners raise the verb in their first language because of its rich agreement morphology, then may do likewise when they come across verb morphology in the L2 that they are acquiring. The results of this questionnaire show that this does not occur in the present tense: participants do not behave differently when the verbs are formed with the third person morpheme -s. Regarding verbs in the present tense, students placed the adverb after the verb both in items with verbs that presented the third person -s and verbs that did not (as mentioned in paragraph 3.4). The results seem to suggest that morphology does not trigger verb movement. Nevertheless, the results regarding the verbs written in the past simple tense might suggest otherwise.

Graph 10 shows a higher occurrence of adverbs after the verb with the past simple tense. It seems that students raised the verb more when it presented the past simple morpheme -ed. This could be evidence that a piece of morphological information does trigger verb movement and if this is the case, there must be another reason why the third singular -s does not do the same. A hypothesis that

could explain the lack of triggering in the presence of the third singular morphology is that the -s is not actually seen as a morpheme but as a hapax by the L2 learners. It is well-known that one of the most common mistakes that Italian students make when learning English is forgetting to add the -s to verbs in the third singular person. This may be evidence that they learn it as a hapax, something that occurs only once and not as a piece of distinctive morphology that marks third singular person in English. If this hypothesis was true, even if students do not raise the verb more often when it shows the -s morpheme it would not imply that morphology does not trigger verb movement. Results show that when the past simple suffix -ed is present, students raise the verb over the adverb although things are different when the morpheme -ed marks the participle in the present perfect tense.

Graph 9 shows that the percentage occurrence of the adverb after the participle is basically the same in G1 to the percentage of adverbs placed before the auxiliary, whilst in G2 it is lower than the other types of errors. Students clearly do not raise the participle over the adverb because of the presence of the -ed morpheme as they do with the past tense. This is observable in graph 10 which illustrates a great difference in percentage of adverbs after the verb between the past simple tense and present perfect tense. In the Italian *passato prossimo* the adverb can be found between the auxiliary and the participle as in English, this might be the reason why the percentage of errors in present perfect tense is lower (especially regarding G1). At the same time, graph 9 shows that students in G1 placed the adverb before the auxiliary almost as many times as they placed it

after the participle which does not resemble what one would expect to happen considering the L1 transfer. Schifano (2015) suggested that in southern Italian varieties the verb is raised less than in northern varieties. This could be a reason why many students did not raise the auxiliary with the present perfect tense, although, with further analysis it was found that the majority of the students that placed the adverb before the auxiliary came from the region of Veneto (26 out of 31 students). The hypothesis that students placed it in said position because of the transfer of the southern variety of L1 can therefore be refuted. Another hypothesis that could explain the behaviour of G1 is an overgeneralisation of the no verb movement rule, which is to be expected if Second Language Acquisition presents a U-shaped curve similar to First Language Acquisition (as suggested in chapter 1.2). Moreover, the U-shaped curve seems to find another evidence in the comparison between G1 and G2.

Graphs 4, 6 and 8 compare the performance of each group with the three different verb tenses. G2 percentage of error is higher in all three cases, especially with the past simple and present perfect tenses. It is observable, however, that the types of errors made by G2 are slightly different from G1: G2 put the adverb 27 times after the object whilst G1 placed it in said position only 6 times. Graph 9 shows that the types of errors that G1 and G2 made with present perfect tense are different because of the higher percentage of adverbs placed after the object by G2. Nevertheless, if focus is not considered (as it cannot be accounted as an error) the results still show that G2 performed worse than G1 in all three verb tenses. This could be evidence of a U-shaped curve similar to that found by

Kellerman (1985). The students of the G2 are restructuring the interlanguage grammar and consequently, show contrasting results in their performance: in past tense they transferred the L1 verb movement parameter into the interlanguage grammar, whilst with present perfect verbs they overgeneralised the L2 parameter for which there is no verb movement by disallowing the auxiliary to raise. Conversely, the U-shaped curve found in these results may be of the same kind as Lightbrown's "chunk learning" (2003) and therefore similar to the First Language Acquisition U-shaped curve (as previously mentioned). The results obtained with this study are not enough to account for a specific type of U-shaped learning. A further study could be done with students at their last year of a master's degree course as it will show whether their performance improves or worsens compared to G2.

In conclusion, students performed very well in their questionnaires but there was still a slight occurrence of L1 transfer as some students raised the verb over the adverb. Moreover, verb movement was observable more with the past simple tense, which could provide evidence of the role of morphology in verb movement. Both of these conclusions provide good answers to the first two hypotheses on which this research is based. The third hypothesis has been proven as some difference in the performance of G1 and G2 was found. Specifically, a U-shaped curve was found as the third-year students of G2 performed worse than the first-year students of G1.

Conclusion.

The current study investigated the behaviour of Italian students approaching English as a L2. The questionnaire was used as a tool explain the common mistake Italian speakers make with English: raising the English verb over the adverb.

It is observable that most of the students did not commit any mistakes in placing adverbs in the sentences in the questionnaire. The participants in the study were intermediate to advanced in the acquisition process, however, some consideration can be made by looking at the percentages of errors.

Students raised the verb over the adverb especially when the verb was in past simple tense. This proves that a piece of morphology (-ed) triggered verb movement. The participant transferred the Italian parameter of short verb movement when morphology was present in the verb. This did not happen, although, when the verb was in present tense and presented the third singular person -s. A hypothesis could be that this piece of morphology is treated as a hapax more than a morpheme. If that is the case, it is possible to state that only the past simple morpheme -ed triggered verb movement.

The results regarding the behaviour of students with verb in present perfect show a different outcome. Firstly, it is observable that most of the students performed very well with the present perfect tense and placed the adverb between the auxiliary and the participle as it should be. This performance is to be expected as Italian does behave similarly to English with the equivalent *passato prossimo.* Despite this, participants made some interesting errors. Whilst their mistakes

made with the past simple originate from the transfer of the L1 parameter into the interlanguage, mistakes made with present perfect do not resemble the L1 grammar. It is observable that students placed the adverb before the auxiliary which was not raised at all. Moreover, the students that performed in this way were mostly from the region of Veneto, meaning that it was not the result of the transfer of the Italian southern varieties that do not raise auxiliaries.

An explanation to this performance might be an overgeneralisation of the rule for which verbs do not move in English. This is a characteristic that is mostly found in first language acquisition, but it was proven to be present also in second language acquisition as a phase of the so-called "U-shaped learning". The results of the questionnaire in fact displayed some kind of U-curve as the third year students broadly performed worse than the first year students.

The results found with this research could have been improved with some changes to the questionnaire utilised for the experiment. The first change that could be done is the deletion of the underscore between the object and the adjunct. This change would have avoided students placing adverbs in a focus position. Moreover, it would be interesting to see how the students would have performed in their L1 with similar sentences to the English ones used in the questionnaire. With a control group it would have been clearer how L1 was transferred in the interlanguage grammar.

Another limitation that was found in this study was the time given to the students to fill out the questionnaire. As mentioned in the results paragraph 3.4, students had approximately 30 minutes to finish the questionnaire, although one of the

first-year classes was rushed through the procedure as the professor responsible allowed the researcher only 15 minutes to complete the experiment. Some questionnaires of this class were not evaluated because they were left unfinished due to a lack of time.

In conclusion, it is useful to proceed with the same questionnaire with classes of students on their last year of a master's degree course. This would show a better representation of a U-shaped curve in the process of Second Language Acquisition.

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Appendix.

The final version of the questionnaire.

Studio: Acquisizione lingua inglese come L2 da parte di studenti italiani

Gentile studente/essa,

sono alla ricerca di volontari per la compilazione del questionario da me redatto riguardante l'acquisizione di inglese come L2, in particolar modo della sua sintassi.

L'obiettivo del mio studio è di capire se esiste una correlazione tra sintassi e morfologia nel processo di acquisizione dell'inglese come L2 da parte di studenti italiani.

Il questionario consiste in 68 frasi a completamento. Tutto quello che dovrà fare è inserire una crocetta dove ritiene corretto. Completi queste frasi in maniera spontanea. Il questionario è stato creato esclusivamente per scopi scientifici e resterà anonimo, non avrà perciò alcuna influenza sulla sua valutazione accademica.

Per qualsiasi dubbio mi contatti attraverso il mio indirizzo e-mail:

francesca.brentegani.1@studenti.unipd.it

La ringrazio per la disponibilità,

Francesca Brentegani
Prof. Cecilia Poletto

1) Scheda per la raccolta dati personali

Mese e anno di nascita	
Luogo di nascita	
Città/nazione di provenienza della madre	
Città/nazione di provenienza del padre	
Quali lingue parla dalla nascita?	
In quale/i città/nazione ha frequentato la scuola dell'obbligo?	
In totale, quanto tempo ha trascorso in Paesi anglofoni?	Studio: Lavoro: Turismo: Altro (specificare):

Istruzione:

Per quanti anni ha studiato inglese a scuola?	
Ha mai frequentato una scuola bilingue? Se sì, per quanto tempo?	
Ha mai frequentato corsi di lingua inglese fuori dall'Italia?	
Da quanti semestri studia inglese all'Università?	
In totale da quanto tempo studia inglese (scuola+ università + corsi)?	

DICHIARAZIONE CONSENSO DATI PERSONALI

Ai sensi dell'art. 3 del D.Lgs. n. 196/03 "Codice in materia di dati personali", si informa che:
- i dati forniti saranno trattati dall'Università di Padova esclusivamente per finalità scientifiche
- la raccolta e il trattamento dei dati sarà effettuato con modalità informatizzate e manuali;
- i dati personali saranno trattati secondo quanto previsto dal D.Lgs. 196 del 30/06/2003 e non verranno diffusi a soggetti terzi;
- in ogni momento l'interessato potrà esercitare i suoi diritti nei confronti del titolare del trattamento, ai sensi dell'art.7 del D. Lgs.196/2003.

NOME E COGNOME _____

FIRMA _____

DATA _____

2) Istruzioni

Il questionario consiste in 68 frasi incomplete. A fianco di ogni frase troverà tra parentesi un avverbio che deve essere inserito nella frase per poterla completare. Segni con una crocetta nello spazio indicato da __ la posizione che ritiene corretta per l'inserimento dell'avverbio. Nel questionario troverà frasi come:

Matt__has__washed__the plates__after dinner   *(always)*

Simon__played__the piano__at his party   *(normally)*

The students__have__finished__their homework   *(normally)*

3) Questionario

1. Matt's dad__works__in the evening   *(normally)*

2. Simon__will__call__Laura__tonight   *(surely)*

3. My dog__attacks__the postman__in the morning   *(normally)*

4. Susan and Matt__talked__on the phone   *(always)*

5. Susan__walks__down this street   *(normally)*

6. My dog__has__followed__me__without a collar   *(normally)*

7. Laura__has__planned__her week__in advance   *(always)*

8. Matt__booked__a table__in that restaurant   *(normally)*

9. Laura__has__showered__in the morning   *(always)*

10. The students__have__started__the new chapter   *(just)*

11. Laura__walked__in the morning   *(always)*

12. Susan__joins__her boyfriend__for lunchtime   *(always)*

13. My mum__listens__to that song   *(always)*

14. Matt__complains__about his homework   *(often)*

15. Simon__ordered__pizza__with cheese   *(normally)*

16. My cat__sleeps__on the sofa   *(always)*

17. My friends__change__plans__at the last minute   *(always)*

18. Laura__has__helped__her parents__with the housework   *(normally)*

19. Matt and Simon__watch__the television__on Sundays   (*always*)

20. Simon__has__arrived__home   (*already*)

21. My parents__have__decorated__the house__during Christmas   (*always*)

22. My dad__disagreed__with my grandmother   (*normally*)

23. The band__marched__throughout the city   (*normally*)

24. Simon__has__carried__my luggage__to the airport   (*normally*)

25. Matt__goes__to the market__on the weekend   (*always*)

26. Susan__ danced__in clubs   (*normally*)

27. Laura__smiles__at me   (*always*)

28. My friends__followed__the leader of the group   (*always*)

29. My parents__disagree__with me   (*always*)

30. Laura__has__copied__during a test   (*normally*)

31. My dad__gives__my mum__flowers   (*usually*)

32. Susan__has__finished__her homework__on time   (*always*)

33. Laura__baked__muffins__in the morning   (*normally*)

34. Matt__played__football__at the weekend   (*always*)

35. My boyfriend__cleaned__the apartment   (*just*)

36. Simon__has__lived__in Newcastle   (*always*)

37. The students__use__their laptops__in class   (*always*)

38. Susan__has__stayed__in her room__after dinner   (*always*)

39. Simon__has__invited__Matt__to his parties   (*always*)

40. Laura__is__late__for school   (*always*)

41. The children__helped__their parents   (*normally*)

42. Matt__relaxes__on Sunday morning   (*usually*)

43. Sarah__eats__cereals__for breakfast   (*normally*)

44. Matt__is__studying__in high school   (*still*)

45. Simon__phones__his parents__in the evenings   (*normally*)

46. Laura__used__her tablet__in class   (*always*)

47. Simon__walks__in the evening   (*often*)

48. My siblings__are__arguing__with each other   (*always*)

49. Susan__called__Laura__after a date   (*always*)

50. Simon__laughs__at my jokes   (*normally*)

51. My dog__has__finished__his food   (*already*)

52. Simon__arrived__late__in class   (*normally*)

53. Matt__has__shaved__his beard__every week   (*normally*)

54. Matt__has__arrived__on time   (*normally*)

55. His__sister__goes__out__on Saturday   (*often*)

56. My parents __travelled__on their holidays   (*always*)

57. His baby__cries__at night   (*normally*)

58. My friends__have__travelled__in the summer   (*always*)

59. Susan__finished__her book   (*just*)

60. Simon__eats__his dinner__late in the evening   (*normally*)

61. My mum__has__phoned__me__before an exam   (*normally*)

62. It__snowed__in the winter   (*always*)

63. My sister__has__finished__her lunch   (*just*)

64. Matt__helps__his friends__at school   (*normally*)

65. His girlfriend__trains__in the gym   (*often*)

66. Susan and Laura__talk__for hours   (*always*)

67. Laura__forgot__to meet__her friends   (*almost*)

68. The plane__has__departed__on time   (*normally*)

Grazie mille per la collaborazione!