

## To Inflect or Not to Inflect Is the Question Indeed: Infinitives in Second Language (L2) Portuguese\*

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### *Abstract*

*In light of the predictions of two competing approaches to adult L2 acquisition – Full Access (FA) (e.g., White 1989, 2003; Schwartz & Sprouse 1996) and Failed Features (FF) (e.g., Hawkins & Chan 1997; Licerias & Díaz, 1999) – the present study examines the acquisition of inflected infinitives by English and Spanish/English bilingual adult learners of L2 Portuguese. Target-like acquisition of inflected infinitives requires the resetting of both a syntactic parameter (the Null Subject Parameter) and a morphological parameter (the Infl-parameter) for these learners. Since FF approaches maintain a post-critical period failure to acquire new L2 features lacking from the L1, target-like acquisition is predicted to not be possible. Conversely, FA approaches, which maintain adult parameter resetting is possible, predict that native-like competence of inflected infinitives is attainable, but not inevitably so. The data we present support FA approaches, demonstrating that advanced adult learners achieve native-like interpretative knowledge of Portuguese inflected infinitives. We also consider the role of L1 transfer and its possible implications, as they differ for both groups.*

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## 1. Introduction

If we consider the task of language acquisition in terms of what needs to be accomplished, language learning is more or less the same for first language (L1) and adult second language (L2) acquirers. Despite this similarity, the normal acquisition of an L1 differs markedly from the typical acquisition of an L2 in both developmental sequence and the grammar ultimately attained. In adulthood, second language acquisition (L2A) is characterized by varying degrees of success across individual learners.<sup>1</sup> For example, adult L2A is typified by a ubiquitous foreign accent (Scovel, 1988), pervasive variation in the discursive use of overt inflection (Lardiere 1998, 2000, 2007), and residual optionality in interface-conditioned syntax (Sorace 2000, 2003), even at highly advanced levels. These facts contrast sharply with the normal acquisition of a primary language (L1A) in childhood. L1A is distinguished by a sequential relationship between syntactic accomplishment and the emergence of productive inflectional morphology (e.g., Guasti, 2002; Lust 2006), the universal triumph over so-called vulnerable interfaces (see Platzack 1999; Müller & Hulk 2001), and a remarkably similar route of linguistic acquisition. Should these seemingly opposing facts lead us to conclude that Universal Grammar (UG) is inaccessible in adult L2A?

For the past two decades, generative linguists researching adult L2A have debated the significance of the aforementioned facts for adult UG-continuity (see White 1989, 2000, 2003 for discussion). For example, recent investigations in child L2A have convincingly shown that L1/L2 differences in route – for child and adult L2 learners alike – are due in large part to effects of L1 transfer (e.g., Hazdenar 1997; Schwartz 1992, 2003; Herschensohn et al. 2005). As a result, L1/L2 differences in developmental sequence cannot be used to support a so-called fundamental difference between the two instances of language acquisition (Schwartz, 2003), where this difference is inaccessibility to UG (Bley-Vroman 1990). Though L1 transfer may result in representational deficits even if UG is fully accessible to L2 learners (Schwartz & Sprouse 1994, 1996), transfer alone cannot account for the gamut of L1/L2 differences. For example, L1 transfer alone cannot adequately account for the characteristically variable use of overt morphology by adult learners irrespective of the L1/L2 language pairing. Thus, must variable use of inflection be interpreted as evidence of maturation? This is an important and timely question, since Minimalism (Chomsky 1995) assumes that the locus of parametric differences is found in the properties of Particular Grammar (PG) lexical items.

Adequately answering this question is no small task, as it depends heavily on how one views the relationship between morphology and syntax. In light of

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<sup>1</sup> Our use of the term ‘variable success’ is not limited to learner-to-learner comparisons of L2 ultimate attainment. It is observable that the same adult L2 learner is often variable in his own performance of the L2, especially in the domain of overt morphological production.

research that demonstrates unassailable evidence of new L2 feature acquisition (see White 2003), many contemporary studies supporting adult UG-continuity have attempted to determine why L1/L2 differences occur beyond the assumption of L1 transfer effects. For example, the syntax-before-morphology position argues that morphology and syntax develop separately (e.g. Lardiere 1998, 2000; Prévost & White 1999, 2000; Bruhn de Garavito 2003), in fact, asymmetrically so in the case of L2A (Schwartz 2003). As a result, Full Access approaches (FAAs) understand the chronic L2 problems in morphological production in terms of surface morphology errors (a mapping problem) and not as a result of syntactic deficits. On the other hand, Failed Features approaches (FFAs) (e.g., Hawkins & Chan 1997; Beck 1998; Licerias & Díaz 1999; Licerias et al. 1999; Hawkins & Liszak 2003; Hawkins 2005) interpret morphological errors as evidence of an L2 inability to acquire new morphosyntactic features unspecified in the learner's L1, illustrating that adults are unable to acquire L2 settings of critical syntactic features.

Both FAAs and FFAs must account for L1/L2 differences in route and ultimate attainment. FAAs maintain that L1 transfer accounts for many L1/L2 differences; FFAs claim that maturation is responsible for much of the L1/L2 disparity.<sup>2</sup> In the present study, we test the predictions of FA and FF approaches for the acquisition of inflected infinitives by English and Spanish/English bilingual learners of Portuguese. Target-like acquisition of inflected infinitives requires parameter resetting for both groups. Thus, FAAs, but not FFAs, predict that both groups can acquire a native-like competence of inflected infinitives. We also test both groups to explore the possibility that differences in L1 transfer play a role in the adult acquisition of inflected infinitives, notwithstanding full access to UG.

In the next section, we present a syntactic analysis of inflected infinitives in Portuguese, including a discussion of associated semantic properties we use in the empirical part of the study. We next present a section on study design and methodology, followed by results, discussion and conclusion sections.

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<sup>2</sup> FA approaches acknowledge that L1 transfer is not the only variable that results in L1/adult L2 disparity. (e.g., Epstein et al. 1996, 1998; Flynn 1996; Lardiere 1998, 2000, 2006; Prévost & White 1999, 2000; Sorace 2000, 2003). Space limitations do not permit us to discuss all the issues in detail, however, we acknowledge that in addition to the syntax-before-morphology debate we explicitly discuss, recent research has demonstrated that errors in interface-conditioned syntax seem to be particularly problematic for L2 learners, even at advanced levels of acquisition (e.g. Papp 2000; Sorace 2000, 2003, 2004; Bruhn de Garavito, 2003; Goad et al. 2003; Schwartz 2003; Montrul & Rodríguez-Louro 2004; Unsworth 2004; Pacheco & Flynn 2005; Rothman 2007). As compared to the relative scarcity of errors in the narrow syntax (especially at advanced levels of L2 proficiency), it seems that many errors in L2 acquisition result from vulnerable interfaces – where syntax must interface with other linguistic modules – such as the syntax/pragmatics, syntax/phonology and the syntax/semantics interfaces.

## 2. Infinitives in Portuguese

The objective of this section is to describe Portuguese inflected infinitives in terms of their syntactic distribution as well as the morphosyntactic properties necessary for their acquisition. Both Brazilian Portuguese (BP) and European Portuguese (EP) have inflected infinitives, and their distributions are quite similar, though not identical (see Da Luz 1998; Salles 1999, 2003; Pires 2001, 2006).<sup>3</sup> Notwithstanding, converging on a grammar that permits inflected infinitives (i.e., T(ense) to be free of Agr(eement)) is the same for BP and EP language acquirers, children and adults alike.

### 2.1 The Phenomenon: Inflected Infinitives

Portuguese has two types of infinitives, both unspecified for tense yet demarcated by a specification for person/number-Agr (inflected infinitives) or not (uninflected infinitives). Because BP only actively employs 1<sup>st</sup> and 3<sup>rd</sup> singular and plural forms, only plural forms have corresponding overt morphology for person/number in BP. In EP, however, both the singular and plural 2<sup>nd</sup> persons (in bold) display overt morphology as well, as in (1).

(1)	Singular	Plural
	eu fala+r+Ø	nós fala+r+mos
	<b>[tu fala+r+es]</b>	<b>[vós fala+r+des]</b>

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<sup>3</sup> While under some accounts inflected infinitives of the BP and of the EP types are essentially the same, others have demonstrated important differences, particularly in terms of word order restrictions (e.g. Silva 1996; Da Luz 1998, Salles 1999, 2003; Pires 2001). Raposo (1987) proposed that their distribution is conditioned by the fact that Agr<sub>[+C]</sub>, which is assumed to assign case to the its subject, can only do so if Agr<sub>[+C]</sub> receives case itself (i.e., from the matrix verb). In part, the nominal character of infinitives justifies this analysis and it explains obligatory subject verb-inversion with inflected infinitive complements of epistemic and declarative matrix predicates in EP, which, under all accounts, are taken to be CPs. Raposo, however, argues that the optional subject-verb inversion for complements of factive predicates in EP is explained by assuming they can either be CPs (when there is subject-verb inversion) or IPs (as such it can receive Case *in situ*), although, this analysis is hardly uncontroversial. Alternatively, several analyses maintain that inflected infinitives are always full CPs (in both EP and BP) (e.g., Galves 1991; Madeira 1995; Da Luz 1998; Pires 2001,2006; Salles 2003). For example, under such an analysis and in light of the possibility of preverbal and postverbal subjects in complements of matrix factive predicates in EP, Galves (1991) argued that the subject can either be licensed via spec-head agreement of Agr or under government by T, which for factives is realized in C. Later work by Pires (2001) argues that Galves' approach can follow from the spirit of Uriagereka's (1995) approach to inflected infinitives in Galician –which have a different distribution than both EP and BP (see Longa 1994)– postulating a functional head F that encodes point of view (e.g., focus, contrast, emphasis). See Madeira (1995) for an analysis that assigns semantic properties to C and relates them to mood distinction and see Salles (2003) for evidence from BP that supports Madeira's intuition that relates subject-verb inversion to epistemic modality.

você	vocês
ele fala+r+Ø	eles fala+r+em
ela	elas

'I/ you (EP) sg./ you sg., he, she/ we/ you pl. (EP)/ you pl., they to speak+AGR'

Although Portuguese inflected infinitives co-exist with uninflected infinitives, they have a unique distribution. On the one hand, inflected infinitives act like normal finite clauses in that they take lexical subjects or null subjects, unlike uninflected infinitives, as can be seen in (2).

- (2) a. Eu lamento eles/*pro* não saberem a resposta.  
 b. \*Eu lamento eles não saber a resposta.  
 c. Eu<sub>i</sub> lamento PRO<sub>i</sub> não saber a resposta.  
 'I regret (*pro*)/they/ PRO to know the answer'

As one can see in (3) below, inflected infinitives are dissimilar to finite clauses, yet similar to uninflected infinitival clauses in that they never take the complementizer *que*. In spite of this, they must occur as embedded clauses. Further distinguishing them from uninflected infinitives is their ungrammaticality as embedded interrogatives or relative clauses.

- (3) a. \*É possível que eles saberem a resposta.  
 '*pro* is possible that they know-INF-3PPL the answer'  
 b. É possível que eles saibam a resposta.  
 '*pro* is possible that they know the answer'  
 c. \*Eles quererem saber a resposta.  
 'They want-INF-3PPL know-INF the answer'  
 d. Eles querem saber a resposta.  
 'They want know-INF the answer'  
 e. \*Eles saberem a resposta.  
 'They know-INF-3PPL the answer'  
 f. Eles sabem a resposta.  
 'They know the answer'  
 g. Não sabemos quem convidar à festa.  
 '*pro* (we) not know whom invite-INF to the party'  
 h. \*Não sabemos quem convidarmos à festa.  
 '*pro* (we) not know whom invite-INF-1PPL to the party'

Consider the following examples of English, Spanish and Portuguese. Immediately, we note that the impossibility of (4c) and (5c) contrast sharply with the grammaticality of (6c), showing that the inflected infinitive construction is unparalleled in Spanish and English.

- (4) a. Paul<sub>i</sub> claims PRO<sub>i</sub> to know everything.  
 b. Paul claims that they know everything.  
 c. \*Paul claims they to know everything.
- (5) a. Pablo<sub>i</sub> afirma PRO<sub>i</sub> saber todo.  
 b. Pablo afirma que ellos saben todo.  
 c. \*Pablo afirma ellos saber todo.
- (6) a. Paulo<sub>i</sub> afirma PRO<sub>i</sub> saber tudo.  
 b. Paulo afirma que eles sabem tudo.  
 c. Paulo afirma (eles/*pro*) saberem (eles in EP) tudo.

## 2.2 Differentiating Inflected vs. Uninflected Infinitives

In the empirical study, we test non-native adult learners' knowledge of the obligatory versus non-obligatory control distinction between inflected and uninflected infinitives in Portuguese. Applying Hornstein's (1999) diagnostics<sup>4</sup>, we see that uninflected infinitives display interpretive properties of obligatory control whereas inflected infinitives display properties of non-obligatory control (see Pires 2001, 2006).

As can be seen in (7) and (8), PRO, the subject of uninflected infinitives, must have a local c-commanding antecedent in the matrix clause, whereas the *pro* subject of inflected infinitives may be disjoint in reference from any DP in the sentence.

- (7) [Os nossos<sub>i</sub> amigos]<sub>k</sub> lamentam PRO<sub>\*i/k</sub> chegar tarde.  
 [The our<sub>i</sub> friends]<sub>k</sub> regret PRO<sub>\*i/k</sub> arrive-INF late.
- (8) [Os nossos<sub>i</sub> amigos] lamentam *pro*<sub>i</sub> chegarmos tarde.  
 [The our<sub>i</sub> friends] regret *pro*<sub>i</sub> arrive-INF-1PPL late.

As it relates to possible readings under ellipsis, uninflected infinitives must take a sloppy reading, whereas inflected infinitives only correspond to a strict interpretation of the ellipsis site. Consider the following sentences in (9):

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<sup>4</sup> We did not test these learners' knowledge of the NSP independently. Given their high proficiency and the relative uniformity of the data we present for the inflected infinitive, we assume that these learners must have a pro-drop grammar for Portuguese.

- (9) a. *O João lamenta ter chorado e a Maria também.* (= *Maria lamenta ter chorado*)  
 João<sub>i</sub> regrets PRO<sub>i/\*j</sub> have-INF cried and Maria too. (= Maria regrets having cried).
- b. *O João lamenta termos chorado e a Maria também.* (*lamenta nós termos chorado*)  
 João<sub>i</sub> regrets *pro*<sub>i</sub> have-INF-1PPL cried and Maria too. (= Maria regrets us crying).

The elided material under (9a) can only be interpreted with the sloppy reading of ‘Maria herself regrets her own crying,’ as opposed to (9b), where the ellipsis material must be understood as the strict interpretation of the ellipsis site, which corresponds to ‘Maria regrets our crying’.

Furthermore, inflected infinitives as compared to uninflected infinitives behave differently in terms of allowing (or not) split antecedents for embedded clause null subjects. Consider the following sentences in (10):

- (10) a. *A Maria José<sub>i</sub> convenceu o Roberto<sub>j</sub> PRO<sub>j/\*i+j</sub> a perdoar o Miguelinho.*  
 Maria José<sub>i</sub> convinced Roberto<sub>j</sub> PRO<sub>j/\*i+j</sub> to forgive-INF Miguel.
- b. *A Maria José<sub>i</sub> convenceu o Roberto<sub>j</sub> pro<sub>i+j</sub> a perdoarem o Miguelinho.*  
 Maria José<sub>i</sub> convinced Roberto<sub>j</sub> [that] pro<sub>i+j/\*j+k</sub> [they] to forgive-INF Miguel

In (10a) the subject PRO of the uninflected infinitive does not allow an interpretation where Maria José and Roberto can form a set that serves as its antecedent. Conversely, in (10b), the embedded *pro* can be co-referential with either a set of elements that includes Maria José and Roberto or Roberto and others from the discourse, yet, in light of the plural Agrmorphology of the inflected infinitive, it may not be co-referential with Roberto only. We test for knowledge of the last two distinctions discussed in this section.

### 2.3. Acquiring Inflected Infinitives

By all accounts, the properties displayed by a Particular Grammar (PG) are only possible if they coalesce with the possibilities left open by UG. Thus, PG properties depend on the parameter settings provided *a priori* by UG. Within Minimalism, parameter values are located within the PG lexicon. Specifically, parametric differences surface as a result of language-specific lexical properties related to functional categories and their associated features (and strengths). In other words, PG lexicons vary in terms of which functional categories, features and strengths they instantiate. This language-to-language

variation has a number of syntactic consequences. One such consequence is the possibility of inflected infinitives, which Portuguese, unlike Spanish and English, has.

Earlier work by Raposo (1987) and Quicoli (1988, 1996) demonstrated that inflected infinitives surface via the interaction of a syntactic parameter (the pro-drop setting of the Null-Subject Parameter) and the positive setting of a morphological parameter (the Infl-parameter). Both Raposo and Quicoli propose that INFL is parameterized, labeling it the “Infl parameter” and the “I-Parameter”, respectively. Under both analyses, the Infl structure can be viewed as a morphological parameter of UG that contains values for Tense and Agr. As such, verbs can be valued as  $[\pm\text{Tense}]$ ,  $[\pm\text{AGR}]$ . Finite Infl is specified for  $[\text{+Tense}]$  and an infinitival Infl is specified for  $[-\text{Tense}]$ , independently of Agr. In many languages if Infl is finite it is necessarily specified for Agr (as in English and Spanish where the reverse also holds). Raposo proposed that the positive value of the Infl-parameter (Portuguese) allows for a free choice of  $[\pm\text{Tense}]$  in an Infl with Agr. Inflected infinitives derive from the possibility of having  $[-\text{Tense}]$  Agr. According to Raposo (1987:92), in the absence of  $[\text{+Tense}]$ , Infl (or Agr in Infl) assigns nominative case to its subject if it itself is specified for case (motivated by facts of obligatory subject verb inversion in EP). Verbal Agr is a set of phi-features for number, person, and optionally case, mapped to a morphophonological form in null-subject languages only (Chomsky 1981, Alexiadou & Anagnostopoulou 1998). It follows then that a language with inflected infinitives taking nominative lexical subjects must be a null-subject language and that the choice of  $[\pm\text{Tense}]$  is free of the choice Agr  $[\pm\text{case}]$ , as in (11). In pro-drop languages that also have the positive setting of the Infl-parameter (i.e. Portuguese, but not Spanish), the compilation of features as in (11d) is possible and thus allows for infinitives that are inflected for person/number Agr.

- (11) a. NP  $[\text{+Tense}]$  Agr $_{[-c]}$  VP – Chinese finite constructions w/o agreement  
 b. NP  $[\text{+Tense}]$  Agr $_{[+c]}$  VP – Finite constructions in Portuguese and Spanish  
 c. NP  $[-\text{Tense}]$  Agr $_{[-c]}$  VP- ECM constructions  
 d. NP  $[-\text{Tense}]$  Agr $_{[+c]}$  VP- Inflected Infinitives

It seems clear that a language with inflected infinitives must be a null-subject language; however, the  $[\text{+ null-subject}]$  value alone does not necessarily entail inflected infinitives. Thus, it remains to be seen how acquirers of Portuguese set the Infl-parameter to the positive setting. Pires (2001, 2006) bases his account on Lightfoot’s cue-scanning approach to language acquisition (Lightfoot 1999), in which the input is argued to be the locus for identifying the purported UG-given structural cues needed to set any given PG syntax. We take a slightly different position since the notion of cues is most traditionally employed within associationist approaches to language acquisi-

tion, as in MacWhinney and colleagues' Competition Model (MacWhinney et al 1989, MacWhinney & Bates 1989). Similar to Pires' account<sup>5</sup> and in line with minimalist assumptions, we assume that learners of Portuguese must acquire the correct feature composition of the different types of Portuguese inflectional morphology via exposure to them from input in order to converge on a grammar that permits finite verbal forms and inflected infinitives. Since the positive setting of the Infl-parameter allows for tense-less Agr morphology, children and adults must learn that Portuguese morphology can encode both tense and person/number or just person/number features. In summary, learners of Portuguese must first set the Null-Subject Parameter (NSP) to the pro-drop value (see Alexiadou & Agnostopoulou, 1998 for a minimalist account) and then further learn that Portuguese has two types of verbal agreement morphology: those with and those without tense.

Comparing the L2 acquisition of inflected infinitives by English and Spanish-English bilingual learners of Portuguese is especially interesting in light of the different possible outcomes for both groups based on L1 transfer. On the one hand, both the grammars of English and Spanish do not allow [[-Tense] Agr] as Portuguese does, which is to say, they are negatively valued for the Infl-parameter. However, Spanish, unlike English, is similar to Portuguese in that its verbal Agr morphology encodes nominal features (crucially, person, number and optionally, case), which is to say, they are both pro-drop languages. To attain target competence of inflected infinitives, parameter resetting must occur for both adult learner groups; however, the English learners must reset both the NSP and the Infl-parameter, while Spanish L1 transfer for the bilinguals means that they need only reset the Infl-parameter. It is reasonable to assume that these facts may be reflected in the performances of these two subgroups.

At first glance, it may appear that acquiring inflected infinitives would be more difficult for English learners. After all, assuming L1 transfer, the Spanish-English bilinguals, being native speakers of a pro-drop language, start with an apparent advantage insofar as they only need to reset one of the relevant parameters. However, viewed differently, it is possible that L1 Spanish transfer could work against the bilingual learners. The fact that the same Portuguese Agr morphophonological form can either encode tense and person/number features or only person/number features (e.g. *falamos* [+TENSE +1PPL] vs. *falamos* [-TENSE +1PPL]) is a possible source of confusion for the Spanish-English bilinguals because the same (or similar) morphophonological forms (e.g. *hablamos* [+TENSE +1PPL]) must have both tense and person/number features in Spanish. Even with full access to UG, this similarity might impede or delay the acquisition of inflected infinitives for Spanish-English bilinguals. Conversely, if UG is fully accessible, English learners, unencumbered by the type of L1 transfer that could cause such confusion, might actu-

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<sup>5</sup> Pires' account was originally formulated to explain language change, and here we extend a modified version of it to L2 acquisition.

ally have an advantage over the Spanish-English bilinguals. One of the goals of the study is to test this notion.

### 3. The Study

This section details the design and methodology of the present study. We report data from two different tasks. The first was a grammaticality judgment task (GJT), employed to test for knowledge of restrictions on the use of inflected infinitives as discussed in section 2.1. Using Hornstein's (1999) diagnostics for testing properties of obligatory vs. non-obligatory control, as reviewed in section 2.2, the second task was an interpretation task that tested for knowledge of interpretive restrictions on inflected vs. uninflected infinitives, such as possible readings under ellipsis and (im)possibility of split antecedent interpretations of embedded null subjects.

The hypothesis is that if the L2 learners have acquired the target underlying morphosyntax for inflected infinitives they will perform like the natives on both tasks. Conversely, if parameter resetting is not possible in L2A, we expect both groups to be unsuccessful on Task 1, performing around the chance level, while, for reasons discussed below, only the English group should be unsuccessful on Task 2.

#### 3.1. Participants

In total, we report data from 25 adult learners of Portuguese. This group can be divided into two subgroups: (i) English native adult learners of Portuguese (n=17) and (ii) Spanish/English native bilingual adult learners of Portuguese (n=8). At the time of data collection, the participants were living and studying Portuguese in Salvador, Brazil. Participants were selected for inclusion in the study if they tested at an advanced level. The non-native Portuguese level was assessed via a compilation of grammar, vocabulary and oral interview tests conducted by native Brazilian Portuguese language instructors. In addition to the two groups of adult Portuguese learners, there was a native control of Brazilian Portuguese speakers (n=19).

#### 3.2. Task 1: Grammaticality Judgment Task (GJT)

The purpose of the GJT was to test the L2 learners' knowledge of the grammatical distribution of inflected infinitives. Learners could demonstrate target knowledge by reliably identifying and correcting the ungrammatical uses of inflected infinitives. The GJT consisted of six sentence types, as in (12) through (16). There were five of each sentence type for a total of thirty test sentences.

- (12) Inflected infinitives as complements of factive matrix verbs  
 Ele lamenta os computadores não terem funcionado. (n=5)  
 'He regrets the computers not have-INF-3PPL worked'

- (13) Inflected infinitives as complements of declarative matrix verbs  
 O João afirma não sabermos a verdade. (n=5)  
 ‘João claims not know-INF-1PPL the truth’
- (14) Inflected/uninflected infinitives as embedded interrogatives/relative clause
- a. \*Não sabemos quem convidarmos à festa. (n=5)  
 ‘*pro* not know whom invite-INF-1PPL to the party’
- b. Não sabemos com quem falar para conseguir a informação. (n=5)  
 ‘*pro* not know whom invite-INF to the party’
- (15) Inflected infinitives in matrix clauses  
 \*Eles conhecerem o presidente muito bem. (n=5)  
 ‘They know-INF-3PPL the president very well.’
- (16) Inflected infinitives w/ the complementizer ‘que’  
 \*Quantos anos elas têm? Penso que serem menores de idade (n=5)  
 ‘How many years they have? *pro* think that *pro* be-INF-3PPL under age.’

Sentences (12) and (13) exemplify felicitous uses of the inflected infinitive. Sentences like (14a) are ungrammatical because inflected infinitives cannot be used in relative clause/embedded interrogative contexts. Conversely, in such contexts only uninflected infinitives are possible, as in (14b). Sentences like (15) and (16) are all ungrammatical since inflected infinitives must be in embedded contexts although they never take the complementizer *que*. When participants deemed a sentence ungrammatical, they were asked to correct the sentence if they were able to do so. This procedure ensured that the learner indicated ungrammaticality for the right reason.

### 3.3. Task 2: Context Match Task

The purpose of this task was to test if L2 learners had knowledge of the obligatory vs. non-obligatory properties of control that differentiate uninflected vs. inflected infinitives. Success on this test provided evidence that the learner’s underlying morphosyntax was target-like. However, one may argue that learners could accomplish this task successfully, even without having target knowledge of inflected infinitives per se, if they simply realized that the Agr morphology bounds the subject. If learners were successful on this task because they realized this, but parameter setting cannot take place, we would anticipate a difference between the two non-native groups’ performances. Since the Spanish bilinguals, but not the English learners, can transfer verbal inflectional morphology that has nominal features, we would expect them to have an advantage on this task. As we will see, this was not the case.

This task was a context/sentence-matching task. We tested for knowledge of obligatory sloppy vs. strict readings under ellipsis and the possibility (or not) of split antecedent interpretations of the null subjects of inflected versus uninflected infinitives. A context was provided followed by two sentences: (a) one that had an inflected infinitive and (b) one that had an uninflected infinitive. The participants were asked to circle the sentences that logically corresponded to the context. They were instructed to circle both sentences if they believed that both were possible. There were four types of context/sentence pairs, as in (17).

(17) *a. Sloppy reading context (n=10)*

Quando o nosso pai morreu a minha irmã chorou em frente de todos. Por isso, ela se sentia um pouco envergonhada. Mais tarde, ela me disse que estava muito orgulhosa de mim porque pensou que eu era muito forte. Ela nunca soube que eu tinha chorado também porque ninguém me viu chorar.

*When our father died my sister cried in front of everyone. As a result, she felt a little embarrassed. Later, she told me that she was very proud of me because she thought I was very strong. She never knew that I had also cried because nobody saw me cry.*

Which sentence(s) is (are) logical given the context?

- i. **Eu lamento ter chorado e a minha irmã também.**  
'*I regret have-INF cried and my sister too.*'
- ii. Eu lamento termos chorado e a minha irmã também.  
'*I regret have-INF-IPL cried and my sister too.*'

*b. Strict reading context (n=10)*

Ontem era o dia da partida de futebol mais importante do ano. Eu pensei que fôssemos ganhar, mas a gente perdeu. Agora estou muito triste e não quero sair. Realmente, eu não posso acreditar que não ganhamos. A minha namorada está muito triste também porque agora eu não quero sair de casa.

*Yesterday was the most important day for soccer of the whole year. I thought we were going to win, but we lost. Now I am very sad and I don't want to go out. Truly, I just can't believe that we did not win. My girlfriend is also quite sad because now I don't want to leave my house.*

Which sentence(s) is (are) logical given the context?

- i. Eu lamento ter perdido e a minha namorada também.  
'*I regret have-INF lost and my girlfriend too*'
- ii. **Eu lamento termos perdido e a minha namorada também.**  
'*I regret have-INF-IPL lost and my girlfriend too*'

**c. Split antecedent w/ PRO? (n=10)**

A Marta e o Roberto eram namorados por 3 anos. Os dois são bons amigos meus. A semana passada, A Marta soube que o Roberto tinha beijado outra mulher durante a primeira semana da sua relação. Obviamente a Marta estava muito triste e ela jurou que nunca mais falaria com ele. Eu não queria que a Marta odiasse o Roberto por isso falei com ela.

*Marta and Roberto were together for 3 years. Both are my good friends. Last week, Marta found out that Roberto had kissed another girl during the first week of their relationship. Obviously, Marta was very upset and she swore that she would never talk to him again. I did not want Marta to hate Roberto so I spoke with her.*

Which sentence(s) is (are) logical given the context?

- i. **Eu convenci a Marta a perdoar o Roberto.**  
*'I convinced Marta to forgive-INF Robert.'*
- ii. Eu convenci a Marta a perdoarmos o Roberto.  
*'I convinced Marta to forgive-INF-3PL Robert.'*

**d. Split antecedent w/ pro? (n=10)**

A minha melhor amiga, a Joana, não tem muito dinheiro mas precisa mudar fora da casa dos pais dela. Ela declara que ainda mora com eles para conservar dinheiro. Mas tem 28 anos e ela precisa ter mais liberdade e independência. Felizmente depois de dois anos de tentar convencê-la, ela aceitou a minha oferta de alugar um apartamento comigo.

*My best friend, Joana, does not have a lot of money, but she needs to move away from her parents' house. She claims that she still lives with them to save money. However, she is 28 and needs to have more freedom and independence. Luckily, after two years of trying to convince her, she accepted my offer to rent an apartment with me.*

Which sentence(s) is (are) logical given the context?

- i. Eu convenci a Joana a alugar um apartamento.  
*'I convinced Joana to rent-INF an apartment.'*
- ii. **Eu convenci a Joana a alugarmos um apartamento.**  
*'I convinced Joana to rent-INF-IPL an apartment.'*

The selection of sentences with uninflected infinitives was expected in contexts like (17a) and (17c) since these contexts presented a sloppy reading under ellipsis or an environment that precluded a set reading of the matrix subject and object as an antecedent. Conversely, the inflected infinitive sen-

tences were expected in contexts like (17b) and (17d) since these contexts presented a strict reading of the ellipsis site and a set reading that included the matrix subject and object as an antecedent respectively.

#### 4. Results

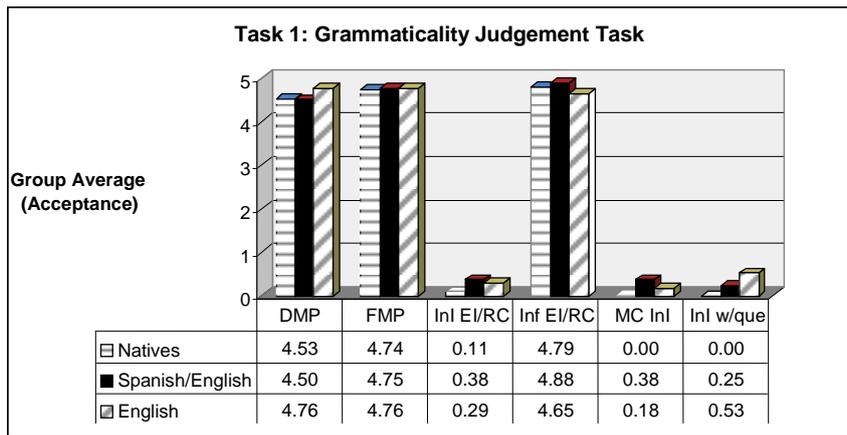
This section is divided into two parts, corresponding to the two empirical tests. Each of these parts is subdivided into three components: (i) a descriptive analysis of the group results, (ii) a quantitative statistical analysis of the group data, which compares the mean score performance of each group of the L2 learners (English and Spanish/English bilinguals) against the native speaker control, and (iii) a look at the individual performances. We employ a one-way ANOVA as an initial measure of inferential statistics, followed by Tukey pair-wise comparisons where appropriate. As is standard, the alpha was set at (0.05) for a 95% confidence level. The statistics were conducted using the mean number correct for each group. An answer was deemed correct if it was in accord with the theoretical analysis presented above, which was confirmed by the native control.

##### 4.1. Task 1

*4.1.1 Descriptive Analysis:* This task sought to test for knowledge of the (un)grammaticality of several sentence types: declarative matrix predicates with inflected infinitival complements (DMP), factive matrix predicates (FMP) with inflected infinitival complements, inflected/uninflected infinitives as embedded interrogatives/relative clauses (InI EI/RC and Inf EI/RC, respectively), inflected infinitives in matrix clauses (MC InI), and inflected infinitives in embedded clauses after the complementizer *que* (InI w/*que*). The numerical analysis was based on the average number of sentences accepted in each context (n=5 for each individual context).

As can be seen in Figure I, the native and non-native groups' behaviors appear strikingly similar. The relevant comparisons for this test were inter-group for each context, comparing the native performance to both the Spanish/English bilingual performance and the English L2 learner performance. All three groups performed in accord with the Portuguese distribution of inflected vs. non-inflected infinitives discussed above. That is, all three groups reliably accepted (i) inflected infinitives in embedded contexts with declarative and factive matrix predicates, and (ii) uninflected infinitives in embedded interrogative/relative clause contexts. Also, all three groups consistently rejected (i) inflected infinitives used as matrix verbs after the complementizer *que* and (ii) inflected infinitives in embedded interrogative/relative clause contexts.

Figure I: Results from Task 1



DMP= Declarative Matrix Predicate; FMP = Factive Matrix Predicate; InI EI/RC = Inflected Infinitives as Embedded Interrogatives or Relative Clauses; Inf EI/RC = Uninflected Infinitives as Embedded Interrogatives or Relative Clauses; MC InI = Inflected Infinitives as Matrix Clauses; InI w/que = Inflected Infinitives under complementizer *que*

4.1.2 *Statistical Analysis:* One-way ANOVA tests were used to quantify the group data. Statistical analysis revealed no significant differences in native vs. non-native group performance in all contexts, except for inflected infinitives used after the complementizer *que*: DMP ( $f = 1.11, p = 0.341$ ); FMP ( $f = 0.02, p = 0.983$ ); InI EI/RC ( $f = 1.52, p = 0.231$ ); Inf EI/RC ( $f = 0.58, p = 0.567$ ); MC InI ( $f = 2.70, p = 0.079$ ); InI w/que ( $f = 5.30, p = 0.009$ ). Given the statistical values for the last context (inflected infinitive after the complementizer *que*), follow-up tests were performed to see where the significant differences lie. These tests revealed no significant difference between the natives and Spanish/English bilinguals ( $t = 1.53, p = 0.17$ ) and a significant difference between the natives and English speakers ( $t = 3.04, p = 0.008$ ). However, it should be noted that this difference stems from the lack of native speaker variation, and is not indicative of gross deviation from target-like behavior. When the averages of group acceptance are compared (natives: 0.00, Spanish/English: 0.25, English: 0.53), it is evident that even the English speakers have an extremely high tendency (88%) to reject sentences in which inflected infinitives are used after the complementizer *que*.

4.1.3 *Individual Results* Although the group results demonstrated native-like behavior for both adult learner groups, we analyzed individual data to determine whether the group trend accurately depicted all individual performances, or instead obscured important variation within the aggregate analysis. As can be seen in Table I, all of the individual learners performed within the range of the native speakers for DMP, FMP, InI EI/RC and Inf. EI/RC contexts. However, there was some individual intra-group variation (i.e. deviation from the native speaker

control) with sentences that used inflected infinitives as matrix clause predicates or after the complementizer *que*. In most cases, the individual divergence represented a one-token deviation from the native control responses, which only appears to be significant in light of the native invariance. Nonetheless, these learners still performed at a level of 80% correct, well above the level of chance and thus indicative of a grammar that instantiates inflected infinitives.

Table I: Individual Results from Task 1

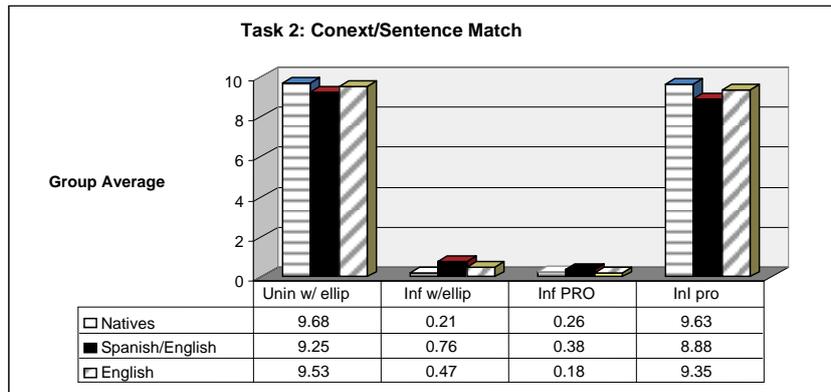
	DMP	FMP	InI EI/RC	Inf EI/RC	MC InI	InI w/ <i>que</i>
Native Average	4.53	4.74	0.11	4.79	0.00	0.00
Native Range	3-5	4-5	0-1	4-5	0	0
S/E Bil a	4	5	1	5	2	1
S/E Bil b	4	5	0	5	0	1
S/e Bil c	5	5	1	5	0	0
S/E Bil d	5	4	0	4	1	0
S/E Bil e	4	4	0	5	0	0
S/E Bil f	5	5	1	5	0	0
S/E Bil g	4	5	0	5	0	0
S/E Bil h	5	5	0	5	0	0
Eng. L a	5	5	0	5	0	0
Eng. L b	5	5	1	5	0	2
Eng. L c	5	5	1	5	0	1
Eng. L d	5	5	0	3	1	1
Eng. L e	4	4	0	5	0	0
Eng. L f	5	4	0	5	0	1
Eng. L g	5	5	1	5	0	1
Eng. L h	5	5	0	5	0	0
Eng. L i	4	4	0	5	1	0
Eng. L j	5	5	0	5	0	0
Eng. L k	4	5	0	5	0	2
Eng. L l	5	5	0	4	1	1
Eng. L m	5	5	1	5	0	0
Eng. L n	4	5	0	5	0	0
Eng. L O	5	4	0	5	0	0
Eng. L p	5	5	1	3	0	0
Eng. L q	5	5	0	4	0	0

DMP= Declarative Matrix Predicate; FMP = Factive Matrix Predicate; InI EI/RC = Inflected Infinitives as Embedded Interrogatives or Relative Clauses; Inf EI/RC = Uninflected Infinitives as Embedded Interrogatives or Relative Clauses; MC InI = Inflected Infinitives as Matrix Clauses; InI w/*que* = Inflected Infinitives under complementizer *que*

4.2 Task 2

4.2.1 *Descriptive Analysis*: This task sought to test for L2 knowledge that inflected infinitives display properties of non-obligatory control whereas uninflected infinitives display properties of obligatory control (i.e., obligatory sloppy readings under ellipsis with uninflected infinitives, obligatory strict readings of the ellipsis site with inflected infinitives, as well as the (im)possibility of split antecedents for null subjects of embedded uninflected (PRO) and inflected (*pro*) infinitives). Since each sentence type allowed only one interpretation and each context clearly corresponded to one interpretation, answers were deemed incorrect either if the sentence chosen to match context did not correspond to the structure that yielded the proper reading or if both sentences were circled.

Figure II: Results from Task 2



Unin w/ ellip = Acceptance of Uninflected Infinitives in Sloppy Reading Contexts; Inf w/ ellip = Acceptance of Uninflected Infinitives in Strict Reading Contexts; Inf PRO = Acceptance of Split Antecedent Readings with Uninflected Infinitives; InI pro = Acceptance of Split Antecedent Readings with Inflected Infinitives

As can be seen in Figure II, the native and non-native groups' behavior was remarkably similar. For this test, the relevant comparisons made were inter-group for each context, comparing the native performance to both the Spanish/English bilingual performance and the English L2 learner performance. All three groups performed in accord with the theoretical analysis presented above. That is, all three groups correlated sloppy readings under ellipsis with uninflected infinitives. Additionally, they did not allow split antecedent interpretations with PRO, the subject of the uninflected infinitive. Conversely, they derived a strict reading of the ellipsis site with inflected infinitives and allowed split antecedent interpretations for the *pro* subject of inflected infinitives.

Table II: Individual Results from Task 2

	Unin w/ ellip	inf w/ellip	Inf. Pro	InI pro
NativeAverage	9.68	0.21	0.26	9.63
Native Range	9-10	0-1	0-1	8-10
S/E Bil a	9	1	0	9
S/E Bil b	10	1	1	8
S/e Bil c	9	0	1	9
S/E Bil d	9	0	0	8
S/E Bil e	10	0	0	10
S/E Bil f	8	0	0	10
S/E Bil g	10	0	0	10
S/E Bil h	9	2	1	7
Eng. L a	10	1	0	10
Eng. L b	8	1	0	10
Eng. L c	10	0	0	8
Eng. L d	9	0	0	9
Eng. L e	8	0	0	10
Eng. L f	9	0	0	10
Eng. L g	10	0	0	9
Eng. L h	10	0	0	10
Eng. L i	10	1	1	7
Eng. L j	10	0	0	9
Eng. L k	10	0	0	10
Eng. L l	9	0	0	10
Eng. L m	10	1	1	8
Eng. L n	9	0	0	10
Eng. L O	10	2	1	10
Eng. L p	10	0	0	10
Eng. L q	10	2	0	9

Unin w/ ellip = Acceptance of Uninflected Infinitives in Sloppy Reading Contexts; Inf w/ ellip = Acceptance of Uninflected Infinitives in Strict Reading Contexts; Inf PRO = Acceptance of Split Antecedent Readings with Uninflected Infinitives; InI pro = Acceptance of Split Antecedent Readings with Inflected Infinitives

*4.2.2 Statistical Analysis:* One-way ANOVA tests were used to quantify the group data. Statistical analysis of all contexts revealed no significant differences in native vs. non-native group performance: Ellipsis contexts (Uninflected (Unin):  $f = 1.38$ ,  $p = 0.262$ ; Inflected (InI):  $f = 1.05$ ,  $p = 0.359$ ); Split antecedent contexts (w/ PRO:  $f = 0.56$ ,  $p = 0.574$ ; w/pro:  $f = 2.29$ ,  $p = 0.115$ ). Therefore, no follow-up tests were needed with these results.

4.2.3 *Individual Results*: In Table II above we provide the results of the individual performances on Task 2 for both adult learner groups, which can be compared against the native speaker range. As was the case for Task 1, the individual results for Task 2 more or less confirm the applicability of the group trends to the individual performances. In general, the non-native speakers performed within the performance range of the native speakers; however, there was slight individual deviation for some learners of both non-native Portuguese groups. As was the case for Task 1, individual learners who performed outside the range of the native-speakers still performed well above the chance level, indicating that their Portuguese grammar had the possibility of inflected infinitives.

## 5. Discussion

In this section, we bring together the results of both tests in light of two competing theories of adult L2A. As discussed in section 1, Full Access (FA) approaches to L2A predict that parameter resetting is possible, while Failed Features (FF) approaches predict that parameter resetting is impossible in light of a purported failure of new L2 morphosyntactic features not available from the L1.

Task 1 was a GJT that tested for L2 knowledge of the distribution of inflected infinitives. Crucially, it tested for knowledge of the environments in which inflected infinitives are not a grammatical option. As individuals and groups, both sets of adult Portuguese learners performed more or less like native speakers on this task. That is, both groups reliably knew that inflected infinitives are not possible as matrix predicates, do not take the complementizer *que*, and are not possible in embedded interrogatives or relative clauses. Both groups also judged correctly the sentences with appropriate uses of the inflected infinitive. In an effort to confirm that the test sentences were being deemed (in)correct for the proper grammatical reasons, the participants were asked to correct the sentences they deemed ungrammatical. The corrections of all three groups were consistently similar, with one exception. In the ungrammatical inflected infinitive sentences with the complementizer *que*, the native speakers fixed these sentences almost exclusively by removing the *que* (i.e. conserving the inflected infinitival clause) while the L2 learners most often corrected these sentences by changing the inflected infinitive to an appropriate finite form. Although the difference in correction behavior is interesting, and we will return to it later in this section, we note here that both ways of correcting these sentences are possible since finite constructions are always an alternative to inflected infinitive constructions.

Task 2 tested for L2 acquisition of inflected infinitives with respect to control. Pires (2001, 2006) demonstrated that only uninflected infinitives display properties of obligatory control while inflected infinitives display

properties of non-obligatory control. We found that L2 learners of Portuguese demonstrated native-like knowledge that Portuguese inflected infinitives behave differently than uninflected infinitives with respect to control. As groups and individuals, the adult learners consistently interpreted the ellipsis material with uninflected infinitives with a sloppy reading, whereas they derived a strict reading of the ellipsis site with inflected infinitives in accord with the contexts provided. Additionally, relating to possible set interpretations of embedded null-subjects of inflected and uninflected infinitives respectfully, the adult learners, like the natives, reliably permitted split antecedents for *pro* while they did not allow split antecedent interpretations of PRO. Earlier, we highlighted the possibility that this task could be completed successfully by realizing that the subject is bound by the Agrmorphology without having underlying target knowledge of inflected infinitives specifically. However, if this were the case, we expected to see differences between the two L2 groups assuming that prior knowledge of a pro-drop language would help in this case. Interestingly, there were no differences between the two L2 groups, which performed equally like native Portuguese speakers. Furthermore, it is important to remember that in this test participants were given the option to select one or both of the sentences following a given context. By selecting only one sentence (the correct one), the L2 learners not only judged that sentence as grammatical but also judged the sentence that was not selected as ungrammatical. Selection of only the correct sentence (and not both) is only possible if the L2 learners truly have native-like knowledge of inflected infinitives.<sup>6</sup>

Coupling the results of Task 1 and Task 2 provides strong evidence in favor of parameter resetting. These adult learners of Portuguese differentiated between inflected and uninflected infinitives with respect to properties of control and had clear intuitions on their grammatical distribution. In order to converge on such knowledge, two things needed to be accomplished. First, L2 learners must have acquired the nominal features associated with Portuguese Agrmorphology. That is, they must have acquired the set of nominal phi-features associated with Portuguese verbal Agrmorphology, which enables the assignment of nominative case to the subject of inflected infinitives in the absence of Tense. In other words, they must have had the pro-drop setting of the Null Subject Parameter associated with their Portuguese grammar. In the case of the English learners, the L2 acquisition of these features provides evidence against so-called FF approaches to adult L2A that assume that the L2 acquisition of new syntactic features is impossible in general. In particular, it provides strong evidence against claims that adult learners of non-pro-drop L1 grammars are unable to acquire the necessary features needed to license null-subjects like L1 speakers of pro-drop languages do (e.g., Clahsen & Hong 1995; Licerias & Díaz 1999; Licerias et al. 1999; Tsimpli & Roussou 1991). Whether maturation manifests in the spirit of Beck's (1998) proposal of local-

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<sup>6</sup> We thank an anonymous reviewer for suggesting this to us.

ized critical periods specifically distressing the feature strength of functional categories or the disappearance of features not selected from UG during the acquisition of the L1 (e.g., Hawkins & Chan 1997; Liceras & Díaz 1999), the fact that these L2 learners were able to acquire the nominal features of Portuguese Agr must entail that UG's inventory of features is still accessible. It is reasonable to suppose, however, that Spanish/English bilinguals transfer these features from their L1 Spanish. However, such transfer is not possible in the case of the English learners, and both non-native groups performed equally native-like on both tasks (see note 4).

Although acquiring these nominal features is a necessary first step, it alone obviously does not guarantee that inflected infinitives are instantiated in any PG, as evidenced by the fact that Spanish, a pro-drop language, does not permit infinitives with person/number agreement. The language learner of Portuguese must further realize that [ $\pm$ Tense] is free of the choice Agr [ $\pm$  case] in Portuguese. All of the individual learners from both advanced adult learner groups demonstrated that they had converged on a Portuguese grammar that permits Agr to be free of Tense, which is to say, they reset the Infl-parameter to the positive value.

One of the primary motivations for testing these two particular L2 groups involved the possibility that Spanish transfer could either provide an advantage, via its pro-drop status, or a disadvantage, since its virtually identical verbal morphology is unable to encode person/number features independent of tense features. However, no advantage or disadvantage was observed since both groups performed native-like on both tasks. In future research, testing learners at earlier stages of development may indicate some differences. In light of the preponderance of the data, which points to the L2 resetting of both a syntactic (NSP) and a morphological (Infl-parameter) parameter, we conclude that evidence provided by this study is only consistent with the notion of adult UG-continuity purported by Full Access (FA) approaches to adult L2A (e.g. White 1989; Schwartz & Sprouse 1996).

The evidence we provide is based on grammatical judgment and interpretive testing only. Admittedly, a coupling of these data with production data would strengthen the conclusions we draw. Specifically, it would enable us to pursue the notion that morphology and syntax are dissociated if we were to find that L2 production of inflected infinitive morphology underdetermines their otherwise demonstrable syntactic knowledge. However, we elected to collect only grammatical judgment and interpretive data in light of the fact that the use of inflected infinitives is almost never obligatory, which is to say there is always a finite construction available to convey the same message. As a result, there is a good possibility that L2 learners of Portuguese may not produce inflected infinitive constructions in the same environments as native speakers of Portuguese (if ever at all), despite an otherwise demonstrable native-like morphosyntactic competence of inflected infinitives (i.e., confirmed by judgment and interpretive tasks).

One could imagine that if the L2 learners were to avoid the use of inflected infinitives in performance this would conceivably only confirm that they actively prefer alternative finite constructions favored by the fact that they constitute the only possibility in their L1s. Preferring the use of finite forms to inflected infinitives in production is not wrong *per se* and would not necessarily reveal anything about underlying competence. Reminiscent of White's (1989) critique of Schachter's (1988, 1989) assertion that the avoidance of certain optional movement operations in L2 English resulted from the fact that the learners' grammars lacked the possibility of movement, we know that when there is another grammatical option, avoidance of particular structures does not necessarily tell us anything about the L2 competence of the avoided structure. In light of this, our decision not to collect production data is partially supported by the L1/L2 difference in correction for ungrammatical sentences in Task 1 (discussed above), whereby the L2 learners, unlike the native controls, avoided inflected infinitives in their correction of appropriately identified ungrammatical sentences by changing inflected infinitival clauses to suitable finite forms.

Conversely, production data might not have indicated avoidance at all. On the one hand, production data may very well have been native-like. On the other hand, it may have indicated attempts at inflected infinitive production in appropriate contexts coupled with problems with the realization of the associated overt morphology. In such a case and in light of the L2 performance on the interpretive tasks, we would have been able to discuss such results in light of the syntax-before-morphology debate and the Missing Surface Inflection Hypothesis (e.g., Lardiere 1998, 2000; Prévost & White 1999; 2000). Regardless of what production data demonstrate, further research would be strengthened by their inclusion.

Additionally, further research into the non-native acquisition of Portuguese inflected infinitives will benefit greatly from examining other semantic entailments associated with their acquisition. For example, investigating L2 knowledge of interpretative restrictions on inflected infinitive complements of epistemic matrix predicates, which are subject to a genericity effect (Ambar 1998), will strengthen the conclusions offered herein. Moreover, it will allow for another glimpse at interfaced-conditioned syntactic properties in adult L2 acquisition and a discussion of the effects that the syntax/semantics interface in line with contemporary debates (e.g., Sorace 2000, 2003).

## **6. Conclusion**

The present study provided evidence in support of adult L2 parameter resetting. We tested for the acquisition of inflected infinitives in adult learners of Portuguese. We demonstrated that the possibility of inflected infinitives stems from the interaction of two parameters. First, languages that allow inflected infinitives must be pro-drop languages since the Agr morphology must be able

to assign nominative case to its subject. Second, the Infl-parameter must be positively set in order to permit Agr<sub>[+ case]</sub> to exist with a [-Tense] specification. We demonstrated that, at advanced levels, L2 learners of Portuguese acquire associated interpretive restrictions that differentiate inflected vs. uninflected infinitives with respect to properties of control as well as native-like knowledge of their grammatical distribution. As a result, we conclude that the data reported herein provide robust support of adult UG-continuity theories of L2A.

## References

- Alexiadou, Artemis & Elena Anagnostopoulou. (1998) Parametrizing Agr: Word Order, V-Movement and EPP-Checking. *Natural Language & Linguistic Theory*, 16. 3: 491-539.
- Ambar, M. (1998) Inflected infinitives revisited: Genericity and single event. *The Canadian Journal of Linguistics/La Revue canadienne de Linguistique*, 43:5-36.
- Beck, M. L. (1998) L2 acquisition and obligatory head movement: English-speaking learners of German and the local impairment hypothesis. *Studies in Second Language Acquisition*, 20:311-348.
- Bley-Vroman, R. (1990) The logical problem of foreign language learning. *Linguistic Analysis*, 20: 3-49.
- Bruhn de Garavito, J. (2003) The (dis)association between morphology and syntax: The case of L2 Spanish. In *Linguistic Theory and Language Development in Hispanic Languages* (Silvina Montrul and Francisco Ordóñez, editors), pp. 398-417. Somerville, MA: Cascadia Press.
- Chomsky, N. (1981) *Lectures on government and binding*. Dordrecht: Foris.
- Chomsky, N. (1995) *The Minimalist Program*. Cambridge, MA: MIT Press.
- Da Luz, G. A. (1998) Inflected infinitives in Romance languages. *Cadernos de Estudos Lingüísticos*. 34:7-17.
- Epstein, S., Flynn, S., & Martohardjono, G. (1996) Second language acquisition: Theoretical and experimental issues in contemporary research. *Brain and Behavioral Sciences*, 19:677-714.
- Epstein, S., Flynn, S., & Martohardjono, G. (1998) The strong continuity hypothesis in adult L2 acquisition. In *The generative study of second language acquisition* (Susan Flynn, Gita Martohardjono & Wayne O'Neil, editors), pp. 61-79. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Galves, C. (1991) Inflected infinitives and Agr licensing. Ms., UNICAMP.
- Goad, H., White, L. & Steele, J. (2003) Missing inflection in L2 acquisition: Defective syntax or L1-constrained prosodic representations? *The Canadian Journal of Linguistics/La Revue canadienne de Linguistique*, 48:243-263.
- Guasti, M. T. (2002) *Language Acquisition: The growth of grammar*. Cambridge, MA: MIT Press.
- Hawkins, R. (2005) Revisiting Wh-movement: The availability of an uninterpretable [wh] feature in interlanguage grammars. In *Proceedings of the 7th Generative*

- Approaches to Second Language Acquisition Conference (GASLA 2004)* (Laurent Dedytspotter et al. editors), pp. 124-137. Somerville, MA: Cascadilla.
- Hawkins, R. & Chan, C. (1997) The partial accessibility of Universal Grammar in second language acquisition: The failed functional features hypothesis. *Second Language Research*, 13:187-226.
- Hawkins, R. & Lizsak, S. (2003) Locating the source of defective past tense marking in advanced L2 English speakers. In *The lexicon-syntax interface in second language acquisition* (R. van Hout, A. Hulk, F. Kuiken, and R. Towell, editors). 21-44. Amsterdam: John Benjamins.
- Hazdenar, B. (1997) *Child Second language Acquisition of English: A Longitudinal Case Study of a Turkish-speaking child*. Unpublished doctoral dissertation: University of Durham.
- Herschensohn, J., Stevenson, J. & Waltmunson, J. (2005) Children's acquisition of L2 Spanish morphosyntax in an immersion setting. *IRAL*, 43:193-217.
- Hornstein, N. (1999) Movement and control. *Linguistic Inquiry*, 30:69-96.
- Lardiere, D. (1998) Dissociating syntax from morphology in a divergent L2 end-state grammar. *Second Language Research*, 14:359-375.
- Lardiere, D. (2000) Mapping features to forms in second language acquisition. In *Second language acquisition and linguistic theory* (J. Archibald, editor), pp. 102-129. Oxford: Blackwell Publishers Ltd.
- Lardiere, D. (2006) *Ultimate attainment in second language acquisition: A case study*. LEA: Mahwah: NJ.
- Liceras, J. & Díaz, L. (1999) Topic-drop versus pro-drop: Null subjects and pronominal subjects in the Spanish of Chinese, English, French, German and Japanese speakers. *Second Language Research*, 15:1-40.
- Liceras, J., Díaz, L. & Maxwell, D. (1999) Null Subjects in Non-Native Grammars: The Spanish L2 of Chinese, English, French, German, Japanese and Korean Speakers. In *The development of second language grammars: A generative approach* (Klein, E. & Martohardjono, G. editors), pp. 109-145. Amsterdam: John Benjamins.
- Lightfoot, D. (1999) *The development of language: Acquisition, change and evolution*. Oxford: Blackwell.
- Longa, V.M. (1994) The Galician Inflected Infinitive and the theory of UG. *Catalan Working Papers in Linguistics*, 4:23-44.
- Lust, B. (2006) *Child Language: Acquisition and Growth*. Cambridge: Cambridge University Press.
- MacWhinney, B. & Bates, E. (1989) *The Crosslinguistic Study of Sentence Processing*. Cambridge University Press.
- MacWhinney, B., Bowman, LL. & Merriman, WE (1989). The Mutual Exclusivity Bias in Children's Word Learning. *Monographs of the Society for Research in Child Development*, 54.
- Madeira, A. M. (1995) *Topics in Portuguese syntax: The licensing of T and D*. Ph.D. Dissertation. College of London.
- Montrul, S. & Rodríguez-Louro, C. (2004) Beyond the syntax of the Null Subject Parameter: A look at the discourse-pragmatic distribution of null and overt subjects by L2 learners of Spanish. Paper presented at The Romance Turn, Universidad Nacional de Educación a Distancia (Madrid).

- Müller, N. & Hulk, A. (2001) Crosslinguistic Influence in bilingual acquisition: Italian and French as recipient languages. *Bilingualism: Language and Cognition*, 4:121
- Pacheco, S. & Flynn, S. (2005) Syntax-Pragmatics Interface: Brazilian Portuguese Acquisition of L2 English. Paper presented at the 9<sup>th</sup> Hispanic Linguistic Symposium and the 8th Conference on the L1 & L2 Acquisition of Spanish and Portuguese.
- Papp, S. (2000) Stable and developmental optionality in native and non-native Hungarian grammars. *Second Language Research*, 16:173-200.
- Pires, A. (2001) The syntax of gerunds and infinitives: Subjects, Case and control. Ph.D. dissertation. University of Maryland, College Park.
- Pires, A. (2006) *The minimalist syntax of defective domains: Gerunds and infinitives*. Amsterdam: John Benjamins.
- Platzack, C. (1999) The vulnerable C-domain. Paper presented at the Workshop on Language Acquisition and Language Breakdown, Utrecht.
- Prévost, P. & White, L. (1999) Finiteness and variability in SLA: More evidence for missing surface inflection. *Proceedings of the Annual Boston University Conference on Language Development*, 23:575-586.
- Prévost, P. & White, L. (2000) Missing surface inflection or impairment in second language acquisition? *Second Language Research*, 16:103-133.
- Quicoli, A.C. (1988) Inflection and parametric variation: Portuguese vs. Spanish. Ms. University of California, Los Angeles.
- Quicoli, A.C. (1996) Inflection and parametric variation: Portuguese vs. Spanish. In *Current Issues in Comparative Grammar* (R. Freidin, editor), pp. 46-80. Dordrecht: Kluwer.
- Raposo, E. (1987) Case theory and Infl-to-Comp: The inflected infinitive in Europe Portuguese. *Linguistic Inquiry*, 18:85-109.
- Rothman, J. (2007) Pragmatic solutions for syntactic problems: Understanding some L2 syntactic errors in terms of discourse-pragmatic deficits. In *Romance languages and linguistic theory 2005* (Bauw, S., Dirjkoningen, F. and Pinto, M, editors), pp. 299-320. Amsterdam: John Benjamins.
- Salles, H. (1999) Orações Infinitivas no Português do Brasil. *Revista do Grupo de Estudos Lingüísticos do Nordeste* (GELNE), 1:71-75.
- Salles, H. (2003) Infinitive clauses as substitutes for subjunctive clauses in Brazilian Portuguese. *Romance linguistics: Theory and acquisition* (Pérez-Leroux, A. & Roberge, Y. editors), pp. 197-208. Amsterdam: John Benjamins.
- Schachter, J. (1988) Second language acquisition and its relationship to Universal Grammar. *Applied linguistics*, 9:219-235.
- Schachter, J. (1989) Testing a proposed universal. In *Linguistic Perspectives on Second language Acquisition* (S. Gass & J. Schachter, editors). Cambridge: Cambridge University Press.
- Schwartz, B. (1992) On explicit and negative data effecting and affecting competence and 'linguistic behavior'. *Studies in Second Language Acquisition*, 15:147-163.
- Schwartz, B. (2003) Child L2 acquisition: Paving the way. In *BUCLD 27 Proceedings* (Barbara Beachley et al, editors), pp. 25-50. Somerville: MA: Cascadilla Press.
- Schwartz, B. & Sprouse, R. (1994) Word order and nominative case in nonnative language acquisition: A longitudinal study of L1 Turkish German interlanguage. In *Language acquisition studies in generative grammar* (T Hoekstra & B. Schwartz, editors), pp. 317-368. Amsterdam: Johns Benjamins.

- Schwartz, B. & Sprouse, R. (1996). L2 cognitive states and the Full Transfer/Full Access Model. *Second Language Research*, 12:40-72.
- Scovel, T. (1988) *A time to speak: A psycholinguistic inquiry into the critical period for human speech*. Rowley, MA: Newbury House.
- Silva, M. C. (1996) *A posição de sujeito no Português Brasileiro: Frases finitas e Infinitivas*. Campinas: Editora da UNICAMP.
- Sorace, A. (2000) Syntactic optionality in non-native grammars. *Second Language Research*, 16:93-102.
- Sorace, A. (2003) Near-Nativeness. In *The Handbook of Second Language Acquisition* (C. Doughty and M. Long, editors), pp. 130-153. Oxford: Blackwell Publishers.
- Tsimpili, I. M. & Roussou, A. (1991) Parameter-resetting in L2. *University College London Working Papers in Linguistics*, 149-169.
- Unsworth, S. (2004) On the syntax-semantics interface in Dutch: Adult and child L2 acquisition compared. *IRAL*, 42:173-187.
- Uriagereka, J. (1995) An F position in Western Romance. In *Discourse Configurational Languages* (K. Kiss, editor), pp. 153-175, New York: Oxford University Press.
- White, L. (1989) *Universal grammar and second language acquisition*. Philadelphia: John Benjamins.
- White, L. (2000) Second language acquisition: From initial to final state. In *Second language acquisition and linguistic theory* (J. Archibald, editor), pp. 130-155. Oxford: Blackwell Publishers Ltd.
- White, L. (2003) *Second language acquisition and Universal Grammar*. New York: Cambridge University Press.

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