

Pedagogical versus Linguistic Rules in L2 Spanish Mood Selection in the Morphology-Semantics Interface

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Abstract: The selection of indicative and subjunctive in Spanish is one of the most problematic areas for English L1 speakers (Terrell et al., 1987; Stokes, 1988). This paper presents the results of a pilot study which examines the acquisition of mood distinction in Spanish by English native speakers, specifically, the morphology-semantics interface subjunctive selection. The theoretical framework on which this analysis is based is the competing systems hypothesis (Rothman, 2008) previously tested with aspect distinction in Spanish. The hypothesis claims that a system of learned pedagogical rules competes with an underlying linguistic competence in the process of L2 acquisition. There are four groups of participants in this study: (1) an intermediate level of Spanish learners; (2) an advanced level of Spanish learners; (3) a group of Spanish heritage speakers; and (4) a control group of monolingual Spanish native speakers. All the participants completed two written tasks. The results provide further evidence for Rothman's hypothesis in other areas of grammar in which pedagogical rules differ from the underlying grammar of the L2. The findings of this study also show some type of interference of pedagogical rules in the acquisition of mood production, although they do not hinder the acquisition of the morpho-semantic feature [\pm specific].

Key words: Mood selection, Competing Systems hypothesis, morphology-semantics interface, pedagogical rules, specificity.

Normas pedagógicas contra normas lingüísticas en la selección del modo en español como L2: interfaz morfológico-semántica

Resumen: La selección del indicativo y el subjuntivo en español es una de las áreas más problemáticas para los hablantes nativos de inglés (Terrell et al., 1987; Stokes, 1988). Estas páginas presentan los resultados de un estudio piloto que examina la adquisición de la distinción de modo en español por parte de hablantes nativos de inglés, concretamente se analiza la interfaz morfo-semántica en la selección de subjuntivo. El marco teórico en el que se basa este estudio es la hipótesis de sistemas en conflicto (Rothman, 2008) analizada anteriormente con la distinción aspectual en español. La hipótesis afirma que un sistema de reglas pedagógicas entra en conflicto con la competencia lingüística subyacente del estudiante en el proceso de adquisición de la L2. Los participantes fueron divididos en cuatro grupos: (1) un grupo de estudiantes de español de nivel intermedio; (2) un grupo de estudiantes de español de nivel avanzado; (3) un grupo de hablantes de inglés con español como lengua de herencia; y (4) un grupo de control de hablantes monolingües nativos de español. Todos los participantes completaron dos tareas escritas. Los resultados aportan evidencia de la hipótesis de Rothman en otras áreas de la gramática en las que las reglas pedagógicas difieren de la gramática subyacente de la L2. Los resultados de este estudio apoyan la hipótesis de que las reglas pedagógicas interfieren en la adquisición de la producción de modo en español, pero no evitan la adquisición del rasgo morfo-semántico [\pm específico].

Palabras clave: selección de modo, hipótesis de sistemas en conflicto, interfaz morfo-semántica, reglas pedagógicas, especificidad.

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1. Introduction

The difference between indicative and subjunctive in Spanish as a second language (L2) is usually introduced in the classroom in the first year of instruction. However, mood ical concepts for L2 learners, even after several semesters of classroom instruction; especially for English native speakers whose L1 does not manifest the same system for mood distinction (Terrell et al. 1987). The difficulties in the acquisition of mood verbal morphology in Spanish for English speakers are reflected on the vast literature that has been written on the topic from different perspectives; cognitive (Correa, 2011; Travis, 2003; Ahern and Torres, 2006), pragmatic (Lunn, 1988; Mejias-Bikandi, 1998), morphosyntactic (Quesada, 1998; Gudmestad 2006), sociolinguistic (Lynch, 2000; Silva-Corvalan, 1994), psycholinguistic (Collentine, 1998), among others, mainly focusing on the morphosyntactic/semantics interface.

Establishing a classification of mood distinction or even describing its uses in Spanish can be challenging. In fact, formal instruction tends to present such contrast in an overly simplified manner; for example, in most textbooks for L2 Spanish beginners, the subjunctive in adjectival clauses is linked with a set of matrix sentences such as *querer NP que, necesitar NP que, buscar NP que*:

a. Quiero una casa que *esté* en el centro de la ciudad.

(I want any house that is in the center of the city)

b. Necesito un ordenador que *tenga* el teclado español.

(I need any computer that has a Spanish keyboard)

c. Busco un restaurante donde *sirvan* comida tailandesa.

(I'm looking for any restaurant that serves Thai food)

These oversimplified rules ignore the semantic distinctions that predict mood selection in Spanish adjectival clauses. Students do not usually receive formal instruction about the fact that “[i]n adjective clauses, the referential status of an antecedent (i.e., whether it refers to some person/thing in particular or some hypothetical person/thing) would frequently remain ambiguous were it not for the fact that the subjunctive connotes that the antecedent is indefinite” (Collentine, 2002: 882).

(2) Busco un restaurante que *sirve/sirva* comida china.

(3) Voy a hablar con alguien que *sabe/sepa* algo de la gramática.

On this topic, Velasco-Zarate (2006) observed that the main difference between Spanish and English is that in English matrix/root sentences, noun phrases (NPs) with the definite or indefinite article are ambiguously specific or non-specific:

(4) a. We're looking for a secretary. (His name is Robert, and he should have been here an hour ago).

b. We're looking for a secretary. (Anyone who can create a webpage will do).

However, in Spanish there is a link between mood and specificity in restrictive relative clauses:

(5) a. La empresa contratará a la secretaria que *sabe* inglés.

Det company hire-fut a particle Det secretary that know-IND English.

The company will hire the secretary that knows English. (Her name is Rosa.)

b. La empresa contratará a la secretaria que *sepa* inglés.

Det company hire-fut a particle Det secretary that know-SUB English.

The company will hire the secretary that knows English. (They hold the interviews tomorrow.)

The purpose of this pilot study is to examine the subjunctive production and selection in two written tasks among intermediate, advanced L2 learners of Spanish, and heritage speakers of Spanish. It also aims to examine whether certain matrix sentences predict subjunctive selection among the different proficiency levels, and the role that pedagogical rules play in such selection. In order to better understand the development of the Spanish subjunctive mood among L2 learners, this study aims to examine whether certain semantic and morphological features predict subjunctive selection.

The questions that this study addresses are: 1) What is the role of pedagogical rules in L2 grammar in mood selection in Spanish? 2) What are the differences in mood selection across proficiency levels? 3) Do learners acquire semantic entailments conditioned by the morphological features (as in examples (4) and (5) in adjectival clauses? The hypothesis of this study is based on the main

idea of its theoretical framework: Rothman's competing systems hypothesis which predicts a full access to UG, but a system of "learned pedagogical rules contributes to target-deviant L2 performance through the most advanced stages of L2 acquisition" (Rothman, 2008: 76).

2. Previous literature

Research on the acquisition of Spanish has focused both on the production and the interpretation of the subjunctive by English L1 speakers in formal and study abroad settings (Kanwitt and Geeslin, 2014; Russell 2009, Massery 2009, Llopis 2008, Adrada-Rafael, 2017; Isabelli 2007; Isabelli and Nishida, 2005). Selecting mood is extremely difficult for native English speakers to acquire, because according to Collentine (1995: 122), English-speaking intermediate learners do not possess the "appropriate linguistic foundation with which to fully benefit from mood-selection instruction". Instead, learners manifest an interlanguage similar to pidgins which surfaces in conversational, spontaneous speech that highlights content over form, whereas a more careful style surfaces in grammar exercises and academic contexts in which form prevails over content.

Mood acquisition in Spanish has received considerable attention in the literature due to its complexity. However, most of the problems associated with learning the subjunctive have to do with how the grammar is presented in formal instruction. Jelinski (1977) observed that textbooks explain how the use of the subjunctive is determined by word lists with vague rules: for example, a list of matrix sentences that express doubt or disbelief and always require subjunctive in the subordinate clause according to textbooks are *dudar que*, *no creer que*, or *es probable que*. Jelinski (1977) already noted four decades ago that the classification of verbs according to whether they express subjectivity (desire, doubt, possibility, or indefiniteness) has poorly served students in understanding the concept of mood distinction. Therefore, Jelinski advocated for a new perspective in mood instruction based on "sound linguistic theory" to minimize rote memorization of simplistic rules. He presented the subjunctive in three different syntactic contexts: nominal, adjectival, and adverbial subordinate clauses taking into account semantic/pragmatic contexts of cause/effect and experience/non-experience interface in order to determine the proper use of the subjunctive and the indicative. Nominal clauses manifest a cause/effect relationship; adverbial clauses reflect experience/non-experience contexts; and adjectival clauses reflect both depending on the context.

As mentioned in the introduction, this paper analyses the acquisition of the semantic entailments conditioned by the morphological features in English

speakers learning Spanish. On this matter, Velasco-Zarate (2006) analyzed de mood-determined specificity in L2 Spanish in both, English and Japanese speakers in an immersion program. In her study, the participants had to interpret 24 story-like scenarios which involved a singular object DP (with definite or indefinite article) modified by a restrictive relative clause¹. Her results showed that the Japanese group did not link the indicative mood with the features [+spec +def] and subjunctive [-spec +def]. The English group had problems with the interpretation of [-spec -def], but could interpret [+spec - def] as subjunctive. These results show that in spite of a long immersion program, there are problems regarding the specific interpretations of mood selection in Spanish.

Another study by Collentine et al. (2002) compared the interpretation and production of two groups of Spanish L2 learners. The subjunctive lessons were designed to teach participants that the subjunctive typically expresses one of the following contexts in adjectival clauses: (1) the antecedent has no particular referent; (2) the antecedent is a variable, that is, many distinct referents can be assigned to it; or (3) the existence of a referent for an antecedent is negated. The lesson also explained that the indicative in adjectival clauses indicates a definite referent. The experiment unexpectedly demonstrated that learners do not benefit more from subjunctive instruction when it is coupled with explicit instruction of the syntactic features that surround the use of the subjunctive. Both groups improved in their abilities to interpret and produce sentences where the subjunctive was necessary in adjectival clauses.

Pedagogical rules do not seem to adapt to the findings of second language acquisition research, since they mainly focus on verbal morphology (Collentine et al. 2002), followed by syntax with scarcely any associations to the semantic interface and an almost complete disregard of pragmatics. SLA studies have demonstrated that the mood contrast in Spanish is a multi-conditioned system that needs further investigation in order to better understand how native speakers use it (Pérez-Cortés, 2016; Ahern et al., 2014; Aponte and Ortiz, 2015; Massery and Fuentes, 2014; Botero, 2017; Iverson et al., 2008).

1. The contexts were: [+spec+def] (IND) [-spec +def] (SUB) [+spec -def] (IND) [-spec -def] (SUB)

3. Theoretical Framework: Competing systems hypothesis

The hypothesis by Rothman (2008) posits the existence of two linguistic subsystems that compete in the L2 production of the classroom learner: A system of learned pedagogical rules and the learner's generative system of language acquisition. Rothman assumes full access to Universal Grammar (UG) and hypothesizes that "a system of learned pedagogical rules contributes to target-deviant L2 performance through the most advanced stages of L2 acquisition", explaining some of the learners' problems at the level of production. This hypothesis predicts that defective pedagogical rules generate performance problems even at higher levels of proficiency.

Rothman (2008) tested his hypothesis in the acquisition of aspect, comparing the use of the preterit and imperfect in two production tasks by three groups of participants: a native group of Spanish speakers, a group of naturalistic learners (subjects that had learned Spanish in a naturalistic environment as adults without formal instruction) with English as their L1, and a group of advanced Spanish L2 speakers that had learned Spanish via formal instruction, also English L1 speakers. The results of his study reveal that there is a set of pedagogical rules that interferes with the L2 production even at high stages of L2 acquisition. The group that received formal instruction in Spanish showed target-deviant production of L2 morphology. The group of tutored learners made errors due to the overgeneralization of grammatical rules in specific contexts: (a) frequent stative verbs (*ser, haber*), (b) verbs such as *saber, querer* whose preterite/imperfect contrast in textbooks is determined by its English translation, (c) with adverbials that are described in textbooks as triggers to the preterit or the imperfect (*siempre, cuando*). On the contrary, the naturalistic learners showed native-like accuracy in both tasks.

In a later study, Rothman (2010) tested his hypothesis on the acquisition of pronominal subject distribution in L2 Spanish. Overt subject pronouns are regulated by the pragmatic features [+Focus] or [+Topic shift], whereas null subjects are the unmarked form with the semantic features [-Focus] or [-Topic shift]. However, Spanish language instruction does not focus on null subjects explicitly. Rothman's findings have pedagogical implications, since grammar rules should be based on linguistic rules of the native grammar and not on comparisons between the L1 and L2. Rothman (2010) recommends the integration of linguistic theory in foreign language instruction on the grounds that there are

different semantic, syntactic, and pragmatic factors that trigger distribution options in the grammar of a language.

4. Method

This non-experimental study employs a content analysis design in which the participants were not randomly grouped. The investigation occurs without previous interference from the researcher, since the study is grounded upon a pre-existing characteristic; the students' current knowledge based on length of exposure to formal instruction in Spanish. Three groups of participants completed two different written tasks to test our hypothesis about a correlational relationship between pedagogical rules in formal instruction and selection of subjunctive.

4.1 Participants

The participants of this pilot study are twelve females and three males, all of them are L2 Spanish learners enrolled in Spanish courses at a major Southern University in the United States. Their ages range from 18 to 21 years. The students are comprised of different groups based on their proficiency in Spanish². Group 1 is composed of 6 intermediate level learners enrolled in intermediate level courses of L2 Spanish (fourth and fifth semesters) who had received prior instruction on the past and present subjunctive. Group 2 is made up of 7 advanced level learners taking advanced level courses of L2 Spanish (sixth and seventh semesters) who had also been instructed on mood selection in Spanish. Both Group 1 and Group 2 had primarily learned Spanish in a formal setting. Group 3 is formed by 2 heritage Spanish speakers (1 female and 1 male) who have learned Spanish in an informal setting, but have also received formal instruction on the subjunctive. Group 4 is formed by three monolingual Spanish native speakers from Spain. All participants in groups 1, 2 and 3 were native speakers of English, and had previously been instructed on the subjunctive mood in noun clauses, adverbial clauses and adjectival clauses.

4.2 Tasks

The data were gathered from the participants by means of two different written tasks to make the mood selection across participants more easily comparable:

2. The level of proficiency of the students was previously determined by the University where the students are enrolled.

Task 1: The participants answered 13 questions (appendix A) aimed to elicit the subjunctive mood. Learners were told that the purpose of the study was to compare different perspectives of American and Hispanic students in order to facilitate answers more focused on meaning than on form. This task tried to obtain several subjunctive contexts in the students' production (reaction, futurity, desire, prohibition) with questions such as:

- (6) a. ¿Qué cosas suelen prohibir los padres a los hijos adolescentes en EEUU?
 b. ¿Qué tipo de trabajo prefieres en el futuro?
 c. ¿Qué consejos importantes sobre la vida te han dado tus padres?

Task 2: For the second activity, participants completed a written preference task, similar to the one used in Gudmestad's (2006) research on Spanish mood selection. The students read a contextualized text written in Spanish, and chose the mood (indicative or subjunctive) in 48 different contexts that were integrated in the story (appendix B). The sentences in this task contain adverbial, adjectival and nominal clauses, even though the goal of the activity was to analyze mainly the context [+/-specific] in adjectival clauses. Gudmestad's task presented a story about college students planning a summer vacation, and the task of the present research describes a story about the first day of classes of a college student. Another difference between both analyses is that Gudmestad presented the context in English in order to eliminate comprehensibility factors that could affect the student's performance. However, in this task the contexts were presented in Spanish in order to avoid further influence of the L1.

5. Analysis and results

5.1 Task 1

For task 1, the subjunctive and indicative sentences were classified according to several criteria in order to identify the students' preferences when producing mood morphology in Spanish: a) mood/tense used by the student (such as subjunctive, indicative, infinitive, or future); b) level of proficiency of the student (intermediate, advanced, heritage speaker); c) the matrix verb produced by the participants: reaction (*es mejor que, es importante que*), desire (*querer, preferir, etc.*), futurity (when using adverbs such as *en cuanto, cuando*), advice (*recomiendo que*),

and prohibition; and d) the irregularity of the verb in the subordinate clause, following analyses of Gudmestad (2006), and Quesada (1998) who found it to be a significant factor triggering the use of subjunctive. Regarding this last criteria, stem-changing verbs (such as *volver-vuelve*) have been included in the irregular category of verbs. Gudmestad (2006) decided not to classify these forms as irregular, due to their similarity with their indicative counterpart. However, in this study such verbs are considered salient forms that cause conjugation problems for learners of Spanish, so they were included in the irregular group of verbs as in Quesada (1998).

The first activity was designed to elicit responses with the subjunctive form. Nevertheless, in a total of 117 times that the subjunctive mood should have been used by participants, the results show that it was only elicited in 55 cases. In the remaining 62 sentences in which subjunctive would have been the proper mood participants used some other expected forms, such as indicative or infinitive, and other less expected forms, such as conditional, future, gerund, or even nouns.

- (7) Prefiero un trabajo que *ayudar* en un manera o otro la gente. (Infinitive)
- (8) Pero preferiría una que *fue* util para un trabajo y que me *haría* feliz. (Indicative/conditional)
- (9) Los padres prohibieron la *tomado* de alcohol. (Noun)
- (10) *Bebiendo* y *maldiciendo* se prohibaban. (Gerund)

Table 1 shows the results of the students’ responses to the questions in task 1 classified according to the meaning of the sentence and the mood (or verbal form) used by the participants. The table combines the results of the three groups of participants. Total percentages do not add up to 100% due to rounding.

Table 1: Task 1. Subjunctive use in the group 1, group 2, and group 3

	Future	Advice	Reaction	Desire	Prohibition
Subjunctive	41.17%	78.94%	22.72%	48%	48.48%
Indicative	29.4%	21.06%	63.63%	20%	9.09%
Infinitive	5.88%	0%	13.63%	5%	36.36%
Other	23.52%	0%	0%	4%	6.06%

The distribution of the data for task 1 shows several general trends. The data indicate that the participants preferred the subjunctive mood over the indicative when expressing advice (78.94%), followed by prohibition (48.48%), and futurity (41.17%). Conversely, when expressing a reaction with a subordinate clause, the participants chose indicative (63.63%). Table 1 also shows percentages of other forms that the learners used to avoid the subjunctive, mostly leading to ungrammatical constructions. Indicative was the most alternate form used when expressing reaction (63.63%), followed by futurity (29.4%), advice (21.06), and desire (20%). Infinitive was the most alternate form used when formulating prohibition (36%).

Table 2: Task 1. Subjunctive use in Group 1 (intermediate level)

	Future	Advice	Reaction	Desire	Prohibition
Subjunctive	0%	33%	10%	22.2%	28.57%
Indicative	50%	67%	60%	33.3%	7.14%
Infinitive	25%	0%	30%	44.4%	57.14%
Other	25%	0%	0%	0%	7.14%

Table 2 indicates that the six participants in group 2 showed a preference for the use of the indicative in three out of the five different matrix sentences (futurity, advice, and reaction), whereas the infinitive form was the most frequent form in sentences expressing desire (44.4%) and prohibition (57%). In a total of 40 cases subjunctive would have been the proper mood choice. Verbs in the subjunctive mood were not used at all when expressing futurity. Additionally, the subjunctive was not the most frequent form in any of the categories, although its use in advice and prohibition sentences show slightly higher percentages than in the rest of the categories. The following sentences are examples of the production of Group 1 in task 1:

- (11) A mis padres no les importa si me *casaré* un hombre rico. (Future)
- (12) No *come* a Taco Bell. (Advice)
- (13) Ojalá que *sea* casado con niños. (Desire)
- (14) que a veces no *estén* tan pasionada como yo. (Reaction)
- (15) Los padres prohíben *estar* afuera después de la media noche. (Prohibition)

Table 3: Task 1. Subjunctive use in Group 2 (advanced level)

	Future	Advice	Reaction	Desire	Prohibition
Subjunctive	45.45%	84.6%	40%	53.84%	66.6%
Indicative	27.27%	15.4%	60%	30.76%	16.6%
Infinitive	27.27%	0%	0%	7.69%	8.3%
Other	0%	0%	0%	7.69%	8.3%

The data in table 3 show that the type of verbs used by the 7 participants in the advanced group differed from the responses of the intermediate group. In a total of 59 cases subjunctive would have been the proper mood choice. Group 2 showed a tendency to produce more complex constructions, and to employ the subjunctive mood. The use of the subjunctive was more frequent when expressing future (45%), advice (84.6%), desire (53.84%), and prohibition (66.6%). However, sentences expressing reaction were more commonly used in the indicative mood (60%). Other ungrammatical forms were also used to avoid the subjunctive form, but they were not as frequent as in the intermediate group. The following are examples of the production of group 2:

(16) Sin importarles lo que *escoja* hacer. (Future)

(17) Somos arrogantes por eso no *estés* deprimido cuando alguien es antisimpático. (Advice)

(18) Me gusta que en este país *existan* libertades. (Reaction)

(19) Muchos no quieren que sus hijos *fuman*. (Desire)

(20) Prohiben... *manejen* sin permiso, *hagan* drogas, y otras cosas ilegales. (Prohibition)

Table 4: Task 1. Subjunctive use in Group 3 (heritage speakers group)

	Future	Advice	Reaction	Desire	Prohibition
Subjunctive	100%	100%	0%	100%	57%
Indicative	0%	0%	100%	0%	0%
Infinitive	0%	0%	0%	0%	43%
Other	0%	0%	0%	0%	0%

The only two heritage speakers in this research produced more native-like responses in the 17 sentences in which subjunctive would have been the expected form. Categorical percentages found in futurity, advice, and desire represent the subjunctive as the only selected mood for those meanings. Interestingly, the control group preferred the subjunctive mood when expressing reaction, however, Group 3 only used the indicative form as in:

(21) Me gusta que la tecnología en el pueblo todavía no *es* muy avanzada.

(22) No me gusta que el dinero no *esta* distribuido entre todos.

Regarding sentences of prohibition, this group manifested variation with 57% of responses in the subjunctive form, and 43% in the infinitive, but unlike the intermediate and advanced groups, infinitive was used in acceptable grammatical constructions.

As seen in tables 1-4 for task 1, group 1 tended to avoid the subjunctive by using simple syntax sentences with indicative, infinitive, and other forms. Yet, the production of subjunctive increased as the level of proficiency increased. Additionally, tables 3 and 4 indicate that both group 2 and 3 preferred the subjunctive when expressing future, advice, desire, and prohibition, but opt for the indicative in reaction clauses.

Regarding morphological factors, no correlation was found between the irregularity of the verb in the subordinate clause and mood preference among the participants in task 1.

5.2 Task 2

The written preference task that the students completed shows interesting results. As shown in Appendix B, students had to read a contextualized text writ-

ten in Spanish and choose the mood (indicative or subjunctive) in 48 different contexts integrated in the story. Subjunctive should have been used in 25 cases with different meanings, such as reaction, desire, futurity, and specificity of noun in adjectival clauses, which is the focus of this task:

(23) Es mejor que nosotros *buscamos/busquemos* a alguien que nos ayuda/ayude con las matemáticas fuera de la clase. (Reaction)

(24) Cada año, cuando *llega/llegue* el final del curso, ese profesor suspende (*to fail*) a la mitad de la clase. (Future)

(25) Busco un libro que *es/sea* de matemáticas. (Adjectival clause)

Table 5 shows the percentage of accuracies and inaccuracies in mood selection in task 2 for groups 1 and 2.

Table 5: Task 2. Subjunctive accuracy in a written preference task by two proficiency levels

	Group 1	Group 2
Accuracies	66.19%	85.16%
Inaccuracies	33.8%	14.8%

Table 5 presents the difficulties that Spanish L2 learners with L1 English have when selecting mood in Spanish. However, an encouraging fact that the previous table shows is the progressive control of mood distinction as the proficiency in the language increases with more exposure to the language. The performance of Group 3 in task 2 in reaction sentences (*es mejor que, es importante que, or es extraño que*) was identical to the control group’s (monolingual native speakers) answers. This contrasts with task 1 in which heritage speakers chose indicative instead in a 100% when producing reaction clauses. However, the performance of Group 3 with adjectival clauses contrasted with the control group’s answers, as seen in Table 6.

Table 6. Task 2: Specificity of the NP. Percentage of accuracies in determining the feature [+specific] in adjectival clauses.

Group 1	Group 2	Group 3
57,81%	66,19%	68,18%

The data in Table 6 focuses on the 11 adjectival clauses included in task 2; 8 of the sentences had the feature [+specific] for the NP (with indicative as the correct mood choice) whereas in 3 cases the NP was [-specific] (requiring subjunctive). The results indicate that the three groups of learners chose the subjunctive in adjectival clauses in a more accurate manner as their level of proficiency increases. Nevertheless, it seems that the learners pay more attention to the matrix clause (*buscar NP que, querer NP que, necesitar NP que*) introducing the subordinate sentence as mood triggers in Spanish, and overlook semantic features such as [+/- specificity], commonly disregarded in textbooks. In sentences such as (26)-(29), the three groups of learners tended to use subjunctive mood:

(26) Buscamos a un chico de tercer año que *sabe/sepa* mucho de matemáticas.

(27) Busco un diccionario de español-inglés que *tiene/tenga* la tapa amarilla

(28) También necesito escribir un ensayo que *tiene/tenga* al menos 1000 palabras.

(29). No tengo tiempo, porque necesito ver una película que *es/sea* de Almodóvar.

However, in the previous sentences the indicative was the proper mood choice, since the context in the story indicated that the NP was [+specific]. Students seemed to ignore this semantic feature and focus on the matrix sentences that triggered mood selection in Spanish. Interestingly, this was also the case with group 3, whose production differed from the answers of the control group of Spanish native speakers. Monolingual Spanish speakers interpreted the feature [\pm specific] correctly, and chose the appropriate mood in 100% of the sentences, whereas heritage speakers' accuracy shows a lower percentage (68.18%).

Regarding the irregularity of the verb, Gudmestad (2006) and Quesada (1998) found it to be a significant factor. However, this analysis could not find a correlation between the irregularity of the verb and mood preference among the participants, probably due to the low number of responses including such verbs.

In general, the participants seemed to pay more attention to the matrix sentence when selecting mood, than to any other factors.

6. Discussion and conclusions

This study adds to the body of literature of studies that have examined the morpho-semantic features that predict mood selection in L2 learners. In this paper, we presented the results of a pilot experiment in order to provide further evidence of the competing systems hypothesis (Rothman, 2008) with regards to acquisition of mood. The findings of this study seem to lend support to Rothman's hypothesis, which claims that pedagogical rules interfere in the acquisition when they differ from the underlying grammar of the L2. However, the results show that such interference does not hinder the acquisition of the morpho-semantic feature [\pm specific] as seen in Table 6. Students show a higher level of accuracy as their exposure to Spanish increases.

The results in Task 1 indicated that subjunctive was not the preferred mood in any of the sentence categories (futrurity, advice, and reaction, desire, and prohibition) for intermediate students in group 2. However, as the level of students increases, there is a corresponding increase in the selection of subjunctive in most of the sentence categories, except for reaction. In this sense, group 2 and 3 showed a very similar performance, indicating that further input is needed for mood acquisition, even if it is provided in a formal context.

In this section, we discuss how the results of the analysis respond to the research questions: 1) What is the role of pedagogical rules in L2 grammar in mood selection in Spanish? 2) What are the differences in mood selection across proficiency levels? 3) Do learners acquire semantic entailments conditioned by the morphological features (as in examples (4) and (5) in adjectival clauses?

Regarding the first question, the data in task 2 showed that students performed according to pedagogical rules, instead of paying attention to the semantic feature [\pm specific]. In addition, heritage speakers', whose production in task 1 was more similar to native speakers' discourse, interpreted the feature [\pm specific] correctly in 68.18% of the cases. Although a direct correlation cannot be made, the answers in group 3 could be due to the fact that heritage speakers are also influenced by pedagogical rules in formal instruction.

Concerning the second question, Group 1 differed from the other groups in linking the subjunctive mood with the non-specific interpretation in adjective clauses with verbs that are taught as triggers of the subjunctive mood in Spanish. The percentage of accurate answers for groups 2, and 3 were very similar. This indicates that heritage speakers receiving formal instruction also link mood

distinction with word lists presented by pedagogical rules. However, in the advanced and heritage speakers' groups more learners identified correctly the relationship between specificity and mood selection in Spanish, indicating that further input might help students with the acquisition of the morpho-semantic feature [\pm specific], asked in the third research question.

Some of the limitations of this study had to do with the fact that the independent variable (mood selection) could not be manipulated, the small number of participants and the fact that they could not be randomly assigned nor classified in experimental and control groups. Also, the low number of responses were not sufficient to determine the statistical significance of the results. In order to better understand the development of the Spanish subjunctive mood among L2 learners, and the role of pedagogical rules in its acquisition it is necessary to conduct further research. Future studies could compare an experimental group receiving explicit instruction of the subjunctive rules, and a control group in a more naturalistic setting in order to statistically determine a causal relationship of the interference of pedagogical rules in the acquisition of Spanish subjunctive.

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Appendix A. Sample questions in task 1

¿Qué cosas suelen prohibir los padres a los hijos adolescentes en EEUU?

¿Qué te prohibían tus padres cuando eras pequeño/a?

¿Qué tipo de trabajo prefieres en el futuro?

¿Qué consejos importantes sobre la vida te han dado tus padres?

¿Qué te gusta y lo que menos de tu país? ¿Por qué?

Por lo que sabes de la cultura hispana ¿qué recomendaciones daría a los turistas hispanos que visitan EEUU?

Appendix B. Sample sentences in task 2 and coding explanation

Por la tarde, después del almuerzo, fui a comprar el libro para la clase de matemáticas, pero cuando llegué a la librería no recordaba el nombre del libro, así que le dije al librero:

A. Busco un libro que *es/sea* de matemáticas.

Entonces, el librero me preguntó el nombre del libro, pero le dije que no lo recordaba. Después, me preguntó el nombre de mi profesor de matemáticas, y cuando le dije que era el Dr. González, el librero respondió:

B. Sé que el Dr. González *utiliza/utilice* este libro para su clase de matemáticas de primero.

Example (A) was coded as an adjectival clause requiring indicative, with an irregular verb in the subordinate clause, and [+specific] NP (libro de matemáticas).

Example (B) was coded as a noun clause requiring indicative with a regular verb in the subordinate clause.