

Bilingual Acquisition: Pedagogical implications for teaching present indicative tense in French

ABSTRACT: To analyze bilingual acquisition, links are made between contributions of studies on bilingualism and those of error analysis and interlanguage studies, which consider language acquisition as the development of a transitional competence. This evolution is apparent in the development of particular linguistic structures, such as present indicative morphology in written French. It can be seen that discourse of 30 Mexican university students who completed 140 hours of learning contains both inter- and intralingual features, but the proportions of these in our sample suggest that the student's interlanguage is no longer characteristic of subtractive and compound bilingualism, both relying on the mother tongue, but rather of incipient coordinate bilingualism.

KEY WORDS: Coordinate, compound, subtractive, bilingualism.

RESUMEN: Para analizar la adquisición bilingüe, enlazamos los aportes del bilingüismo con los del análisis de errores y del Interlenguaje que consideran la adquisición lingüística como el desarrollo de una competencia transitoria. Se muestra así que la progresión del bilingüismo es un continuo que evoluciona del bilingüismo *sustractivo* al bilingüismo *compuesto*, ambos basados en rasgos interlinguales, y que desemboca en el bilingüismo *coordinado*, sustentado en rasgos intralinguales. Esta evolución se denota en el desarrollo de determinadas estructuras lingüísticas, como es el caso de la morfología del presente del indicativo del francés escrito. Se puede observar así que el discurso de 30 estudiantes universitarios mexicanos con 140 horas de enseñanza-aprendizaje, contiene características inter e intralinguales, pero la proporción de éstas refleja que el Interlenguaje ya no se encuentra en la etapa del bilingüismo sustractivo y compuesto, sino que se sitúa en los inicios de desarrollo de un bilingüismo coordinado.

PALABRAS CLAVE: Bilingüismo, coordinado, compuesto, sustractivo.

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Introduction

Bilingualism—which, according to Jakobson (1963), is the fundamental problem of linguistics—is a topic that has recently gained interest in the fields of psycholinguistics, neurolinguistics, sociolinguistics, education, and language planning. Bilingualism is a topic of utmost importance, since it affects the development of the whole human being. As proposed by Vygotsky ([1935], 2000), indeed, not only intellectual development of the child, but also the formation of his character, emotions, and personality as a whole depend directly on speech and, consequently, we must disclose in one form or another the connection between being mono- or bilingual and the child's speech development. In the 21st century, Bialystok (2013: 7) supports this view and considers that “across a wide range of studies investigating a variety of abilities, it is clear that bilingualism is an experience that has significant consequence for cognitive performance”.

This paper reflects on bilingualism, its impact on cognition and language acquisition, as well as its implications for the methodology of foreign language teaching, specifically on the case of the present indicative tense in French.

To analyze language acquisition, links are made between contributions of studies on bilingualism and those of error analysis and interlanguage studies, which consider language acquisition as the development of a transitional competence that is directed towards the target language and contains features of the mother tongue, features of the foreign language, and mixed features (Corder, 1967). It is shown that the progress of bilingualism is a continuum from

subtractive/incomplete bilingualism to *compound* bilingualism, both relying on interlingual features, and from there to *coordinate* bilingualism, relying on intralingual features (Richards, 1971). These proposals are still valid in 21st-century applied linguistics (Alexopoulou, 2006; Balbino, 2007; Bustos & Sánchez, 2006; De Bot, Lowie & Verspoor, 2005; Durao, 2007; Field, 2005; Gass & Selinker, 2008; Han, 2004; Johnson, 2008; Torijano, 2004; VanPatten & Williams, 2008; White, 2003).

This evolution is apparent in the development of particular linguistic structures, such as present indicative morphology in written French. Interest in the development of present indicative morphology lies in the fact that, by being the most commonly used verb tense in French, it is an essential element for developing communicative competence in this language (Bérard & Lavenne, 1991). Furthermore, “this feature of the grammar appears to be particularly sensitive to development” (Schumann, 1982: 341).

It is the responsibility of researchers, educators, and language planners to reflect on bilingualism and know the most recent theoretical approaches of it, in order to offer the best possible conditions for the development of a good bilingualism in the classroom.

Bilingualism and cognition

Since the beginning of the 20th century, contributions have alternated between studies questioning and criticizing bilingualism, and those highlighting its benefits for the human being's cognitive development. This latter perspective has been reinforced since the 1960s (Altarriba &

Heredia, 2008; Cook & Bassetti, 2011; De Groot, 2011; Grosjean, 2010).

One of the first psycholinguistic studies of bilingualism, now a classic, was conducted by Ronjat (1913). The author comes to the conclusion that bilingualism, and the contact with different languages, promotes cognitive and linguistic development. Ronjat's observations are based on empirical research on his own son, who was raised in a bilingual French-German family under the "one person-one language" scheme. The author mentions that the child simultaneously developed two phonetically, grammatically and stylistically independent language systems, that is, a *coordinate* bilingualism. He reports that there was no confusion or interference between the two languages, and no slowing down of his overall linguistic development. In addition, the child developed linguistic awareness at a very early age –he was conscious of his bilingualism–. Ronjat notes, however, that he achieved fluency at a slightly older age than monolingual children.

Contrary to the view of Ronjat on bilingualism at an early age is that of Epshtein, cited by Vygotsky ([1935], 2000). By its logic and early place in the chronology of this discussion, Vygotsky considers Epshtein's research to be important for psycholinguistics. Epshtein's study is based on surveys, personal observations, and some experiments related to the teaching of several languages in Switzerland. For this author, the psychic basis of language is a process of associative relationship established between a phonetic complex and its corresponding signified (the object or idea), the name of which is precisely "phonetic complex" (Epshtein cited by Vygotsky,

2000: 341). Bilingualism thus consists in establishing this system of relationships twice.

In experimental psychology, various associative links generated from a single point may inhibit each other. Indeed, when an idea simultaneously relates to two phonic designations, the tendency of both words is to emerge to our consciousness *after* that idea. The two associative tendencies thus compete with each other and, as a result, the strongest and more usual associative nexus prevails. This fight goes hand in hand with a slowing down and alteration of the associative process (Epshtein cited by Vygotsky, 2000: 341). It should be noted that Epshtein's description corresponds to what is referred to as *compound* bilingualism.

According to Epshtein, even when no nexus are established between the two languages in the child's psycholinguistic structure, they inhibit each other through an antagonistic relationship. Besides associative inhibition, the bilingual experiences interference between the two languages, mixing the two languages and seeing both his mother tongue and second language become impoverished. Mixing the two languages leads to difficulties of expression, insecurity, stylistic errors, and confusion.

The same author suggests that bilingualism also affects thinking. Indeed, each language has its own syntactic, phonetic and semantic cutting planes. These differences complicate the multilingual's thinking, giving rise to a conflict of ideas, as well as inhibited and confused connections between these ideas. In the extreme, bilingualism may cause language pathologies.

Epshtein thus considers that the use of a single language –a monoglottism of ex-

pression—, combined with the passive use of other languages according to the person's receptive abilities—a polyglotism of impression—, is the least damaging multilingualism. The damage caused by polyglotism also depends on age: the person would be more vulnerable in early childhood, when the nexus between thinking and language are not yet consolidated.

Many studies conducted before the 1960s call the linguistic and cognitive benefits of bilingualism into question. It should be pointed out, however, that most pre-1960s authors studied bilingual subjects in an immigration context, that is, under conditions unfavorable to the development of an optimal bilingualism. Due to social, economical and psychological factors, indeed, the bilingualism dealt with is usually compound, incomplete, subtractive and unequal. In addition, rigor of the research design is often questioned in these studies because of the lack of control of a range of variables, such as socio-cultural group (Romaine, 1995).

It is essentially since the 1960s, thanks to a paper entitled “The Relation of Bilingualism to Intelligence” (Peal & Lambert, 1962), that the positive perspective on bilingualism has been reinforced. Numerous authors currently highlight its benefits (Altarriba & Heredia, 2008; Cook & Bassetti, 2011; De Groot, 2011; Grosjean, 2010). It is worth noting that the research context of these studies is not that of immigration, but rather a middle-class one where the two languages and related cultures are not in conflict, allowing a coordinate, complete, additive and egalitarian bilingualism to develop more easily. Such a bilingualism has a positive impact on verbal and non-ver-

bal intelligence; thinking (i.e. decentering, mental and symbolic flexibility, divergent and creative thinking, imagination); as well as language development (i.e. concept formation; semantic development; awareness of language as an object and an abstract system, of the arbitrariness of the linguistic sign and of how it interacts; word identification).

Lambert and Tucker (1972) believe that learning two languages from childhood leads the bilingual to practice a form of “incipient contrastive linguistics.” Indeed, being bilingual involves awareness of the existence of languages in general, and of two language systems in particular, and also involves making the effort to distinguish them and to avoid interference. According to Pinto (1993), the attention given to avoid transfers between languages makes the bilingual twice as careful with its lexical, syntactic, phonetic, and pragmatic choices, leading to a sharper intuition for the principles governing both languages, and language in general.

Authors such as Pinto (1993) and Tunmer and Myhill (1984) consider that a balanced proficiency in the two languages has a positive and decisive effect on language awareness and cognition. They argue that “fully fluent bilingualism results in increased metacognitive/metalinguistic abilities which, in turn, facilitate reading acquisition which, in turn, leads to higher levels of academic achievement” (1984, 176). In the same line, Bassetti and Cook (2011) report that bilingualism accelerates the child's development of syllable awareness and of distinction between word and referent. It also accelerates the development of logical-mathematical intelligence

and the acquisition of a theory of mind. Another relevant 21st-century study, that of Bialystok (2013: 5), further supports this view and suggests that “bilingual children performed better than monolingual children on metalinguistic task that required controlled attention and inhibition”, that they had a better “ability to solve problems that contain conflicting or misleading cues”, and that they performed better in executive processing.

Numerous other 20th- and 21st-century authors have concluded that bilingualism generates benefits for the individual’s intellectual, cognitive, and psycholinguistic development (Altarriba & Heredia, 2008; Cook & Bassetti, 2011; De Groot, 2011; Grosjean, 2010). It should be noted, however, that a particular bilingualism has to be present for these benefits to arise. As pointed out by Bialystok (2013: 9), the studies reporting such benefits are “based on individuals who were fully bilingual and used both languages regularly (often daily) to a high level of proficiency. Clearly, deviations from this ideal would modify the effect of the experience. How much bilingualism is necessary, what type of bilingualism is required, and what particular language pairs maximize these influences are all questions that are still waiting to be answered”. Hence the importance of delving into understanding the typologies of bilingualism.

Bilingualism and typologies

Subordinate and compound bilingualism

In order to define the types of bilingualism, we will focus on typologies based on neuro-linguistics.

In 1953, the linguist Uriel Weinreich postulates the existence of three main types of bilingualism: *subordinate*, *compound* and *co-ordinate*. This typology remains valid in the 21st century (De Groot, 2011).

The proficiency level of each language is a criterion for classifying bilingualism. In this sense, Weinreich (1953) describes a *subordinate* bilingualism characterized by an imbalance in the development of the two languages: while the mother tongue has been strengthened, the second language is still developing and, as a result, bilingualism is incomplete. As can be seen in the Table 1 where column width is proportional to language proficiency level, the subordinate bilingual “views the world” from his mother tongue’s perspective, as does a monolingual person, and exhibits unidirectional transfers from his mother tongue (L1) to his second or foreign language (L2).

Subtractive bilingualism is characterized by language transfer errors from L1 to L2 that arise from problems occurring during learning because of L1 structure (Alexopoulou, 2006). L1 must thus be used as a starting point in order to understand what happens to the learner’s interlanguage (Balbino, 2007). There could be a stage previous to mother tongue interferences where the learner omits words that are obligatory in a particular syntactic structure (Alexopoulou, 2006).

Subtractive bilingualism is also characterized by interlanguage errors that come from interferences from other languages.

Compound bilingualism develops in an environment where the two languages are mixed, where “two languages are spoken interchangeably by the same people and in the same situations” (De Groot, 2011: 131).

Table 1

L1	L2
Organization of L1 semantic units	Organization of L2 semantic units
Organization of the sentence according to L1 syntax	Organization of the sentence according to L2 syntax
Organization of the words according to L1 morphology	Organization of the words according to L2 morphology
Organization of the syllables according to L1 phonology	Organization of the syllables according to L2 phonology
Organization of the phonemes according to L1 phonetics	Organization of the phonemes according to L2 phonetics

Subordinate Bilingualism. Based on Bilinguisme, by M. Paradis (1987: 436). In J. A. Rondal & J.-P. Thibaut (comp.), *Problèmes de psycholinguistique*, Brussels, Pierre Mardaga Editeur.

As a result of this linguistic environment, the bilingual mixes the two languages and interlingual interferences occur, from and toward each language. This person is not able to detect the important conceptual

differences that exist between the two languages, and needs to use both language systems in order to think and communicate.

As shown in Table 2, the lexicon of a compound bilingual includes, for each lin-

Table 2

L1	COMPOUND BILINGUALISM L1 + L2	L2
Organization of L1 semantic units	Organization of L1 + L2 semantic units	Organization of L2 semantic units
Organization of the sentence according to L1 syntax	Organization of the sentence according to L1 + L2 syntax	Organization of the sentence according to L2 syntax
Organization of the words according to L1 morphology	Organization of the words according to L1 + L2 morphology	Organization of the words according to L2 morphology
Organization of the syllables according to L1 phonology	Organization of the syllables according to L1 + L2 phonology	Organization of the syllables according to L2 phonology
Organization of the phonemes according to L1 phonetics	Organization of the phonemes according to L1 + L2 phonetics	Organization of the phonemes according to L2 phonetics

Compound Bilingualism. Based on Bilinguisme, by M. Paradis (1987: 438). In J. A. Rondal & J.-P. Thibaut (comp.), *Problèmes de psycholinguistique*, Brussels, Pierre Mardaga Editeur.

guistic level, a store for the native language (L1), a store for the foreign language (L2), and a mixed store.

Coordinate bilingualism

As shown in the Table 3 where there is the same proficiency level for L1 and L2 (same column widths), in coordinate bilingualism the person develops two parallel language systems: there are, for any one word, two signifiers and two signifieds. According to Canadian psychoneurologist Michel Paradis (1987, 2004), this type of bilingualism is characteristic of individuals who speak each of their two languages as well as those for whom it is the sole mother tongue without any interference or mixing and this, at all levels of the linguistic structure.

In this study, coordinate bilingualism is considered to be a continuum where intralingual errors develop into features of the target language's normative system. Correct inflections are then seen as the last development step of the intralingual stage that characterizes coordinate bilingualism.

By intralingual errors, we mean the following categories of errors:

1. Overgeneralization, that is, the creative strategy by which the learner tries to establish parallelisms and analogies from previously gained knowledge (Alexopoulou, 2006: 24).
2. Incomplete application of rules, that is, the partial application of rules that already exist in the learner's interlanguage (Alexopoulou, 2006: 25).
4. Ignorance of rule restrictions, which reflects the learner's failure to perceive that a rule cannot be applied in all contexts (Alexopoulou, 2006: 25).
5. Standard features of the target language.

Ronjat (1913) states that coordinate bilingualism will be achieved provided that the "one person-one language" scheme is followed in the user's environment. In this way, the bilingual develops two clearly distinct systems and skillfully manages them. With such an organized practice, the per-

Table 3

L1	L2
Organization of L1 semantic units	Organization of L2 semantic units
Organization of the sentence according to L1 syntax	Organization of the sentence according to L2 syntax
Organization of the words according to L1 morphology	Organization of the words according to L2 morphology
Organization of the syllables according to L1 phonology	Organization of the syllables according to L2 phonology
Organization of the phonemes according to L1 phonetics	Organization of the phonemes according to L2 phonetics

Coordinate Bilingualism. Modified from Bilinguisme, by M. Paradis (1987: 435). In J. A. Rondal & J.-P. Thibaut (comp.), *Problèmes de psycholinguistique*, Brussels, Pierre Mardaga Editeur.

son becomes a true bilingual with double communicative competence, as well as a good translator who clearly distinguishes between the two systems (Ervin & Osgood, 1954).

Relevant studies in the field of neurology confirm the existence of compound and coordinate bilingualism. Paradis (1981, 2004), for example, reports two types of cerebral storage systems. The first system is large and “extended” and contains the components of both languages. Thus, both language systems function based on the same neuronal mechanisms and, in case of aphasia, both languages are affected. This type of storage supports the hypothesis of compound bilingualism. Paradis also describes an independent and “dual” storage system in which both languages are located in the same language area of the brain, but each language has mechanisms of its own. In this case, aphasia affects only one language. This type of storage would correspond to coordinate bilingualism.

As shown in Table 4, where language proficiency levels vary among linguistic levels (different column widths), Weinreich’s proposition can prove to be more complex than a three-way classification of bilingualism. In some individuals, indeed, each linguistic level can be organized according to the logics of a particular type of bilingualism-subordinate, compound or coordinate. Paradis (1987, 2004) acknowledges that it is theoretically possible for a speaker to have a coordinate system at the levels of syntax and semantics, while having a subordinate phonology. A bilingual can also be coordinate when it comes to decoding, and subordinate when it comes to coding.

We should then think of bilingualism as organized among the various linguistic levels into different degrees of a continuum that includes, at one end, the pole of subordinate and compound bilingualism, and at the other end, that of coordinate bilingualism. Such a structure is dynamic and changes over time, as the individual gains new experiences.

Table 4

L1	L2
Organization of L1 semantic units	Organization of L2 semantic units
Organization of the sentence according to L1 syntax	Organization of the sentence according to L2 syntax
Organization of the words according to L1 morphology	Organization of the words according to L2 morphology
Organization of the syllables according to L1 phonology	Organization of the syllables according to L2 phonology
Organization of the phonemes according to L1 phonetics	Organization of the phonemes according to L2 phonetics

Variability in the Types of Bilingualism at the Different Linguistic Levels. Based on Bilinguisme, by M. Paradis (1987 : 436). In J. A. Rondal & J.-P. Thibaut (comp.), *Problèmes de psycholinguistique*, Brussels, Pierre Mardaga Editeur.

Present indicative

In this study, we propose that the typologies described above express themselves through particular stages of development of language acquisition at each linguistic level. To support our hypothesis, we focus on the linguistic level of morphology, more specifically on the written morphology of present indicative in French as a foreign language. Because this research seeks to analyze linguistic data quantitatively—through a frequency analysis of the inflections used or omitted by students—the morphological phenomenon under study was described from a structural grammar point of view, where the morpheme is seen as a formal and grammatical component.

There are about 9500 French verbs which are classified into three groups, depending on the ending of the infinitive. The first group includes the verbs ending in *-er* (except the verb *aller*); the second group, part of the verbs ending in *-ir*; and the third group, the rest of the verbs ending in *-ir*, those ending in *-re* or in *-oir*, and the verb *aller*. Verbs of the first group are very consistent in their conjugation. About 96 percent of French verbs belongs to this group; such a regularity thus applies to most French verbs. In addition, most new verbs introduced to the French language are formed based on these rules. The approximately 300 verbs of the second group also show a great consistency in their morphology; fewer new verbs, however, are added to this group, and its lexicon grows slowly compared to the first group. Because of their dynamism, these first two groups of verbs

are considered to have a living conjugation, contrasting with the third group that has a dead conjugation. This last group, indeed, is exclusively made up of Old French verbs—about 30 verbs ending in *-ir*, 30 ending in *-oir*, 100 ending in *-re*, and the verb *aller*—; its lexicon doesn't grow, it even tends to erode. This group is characterized by numerous irregularities. Grévisse (2008) explains its impoverishment by proposing that by the force of analogy, irregular French verbs tend to adopt the regular conjugation, or to disappear. According to Séguin (1989), verbs of the second group should also be considered as having a dead conjugation, given that there has been no change to its lexicon for nearly a century.

The present indicative is a simple conjugation, that is, it is formed without an auxiliary verb. Verbs in the present indicative are thus made up of a single word, with a stem and an ending that indicates the mood, tense and person. The indicative considers the action as a reality; denotes something that occurs at the same moment as the communicative act; and is used to provide information, point out a habit, situate a true fact in an indefinite moment in time, refer to a fact that will take place in the future, indicate that an action is the consequence of another, refer to a fact from the past, and refer to something that occurred in a distant past (Grévisse, 2008). It can thus be seen that the present indicative covers a wide semantic spectrum; it is, as a result, the most commonly used conjugation in French.

Bérard and Lavenne (1991) reported that regular verbs are conjugated according to one of the following conjugation patterns, as shown in Table 5.

Table 5

Singular Inflections of the 1st-Group Verbs	Plural Inflections of the 1st-, 2nd- and 3rd-Group Verbs	Singular Inflections of the 2nd- and 3rd-Group Verbs
Je: <i>-e</i>		Je: <i>-s</i>
Tu: <i>-es</i>		Tu: <i>-s</i>
Il: <i>-e</i>		Il: <i>-t</i>
	Nous: <i>-ons</i>	
	Vous: <i>-ez</i>	
	Ils: <i>-ent</i>	

Present Indicative Regular Morphology in French. Based on *Grammaire utile du français*, by E. Bérard & C. Lavenne (1991: 261-72). Paris: Hatier-Didier.

Irregular inflections are shown in Table 6.

Table 6

3rd-Group Verbs	Present Indicative
Vouloir	Je veux, tu veux
Pouvoir	Je peux, tu peux
Valoir	Je vauX, tu vauX
Dire	Vous dites
Faire	Vous faites, ils font
Aller	Il va, ils vont
Vaincre	Il vainc
Convaincre	Il convainc
Auxiliaries	Present Indicative
Avoir	J'ai, il a, ils ont
Être	Nous sommes, vous êtes, ils sont

Exceptions to Present Indicative Morphology in French. Based on *Grammaire utile du français*, by E. Bérard & C. Lavenne (1991: 261-72). Paris: Hatier-Didier.

Acquisitional features of subtractive, compound and coordinate bilingualism

To classify the acquisitional features of bilingualism, two developmental stages can be defined. The first stage corresponds to subtractive and compound bilingualism, relying on interlingual features –interferences of other languages in target language

discourse–; and the second stage, to coordinate bilingualism, relying on intralingual features –resulting from the process of constructing the target language (Richards, 1971; Alexopoulou, 2006; Balbino, 2007)–.

Subtractive and compound bilingualism are organized around the following categories and examples:

(A.1.) Adaptation of L2 spelling to L1 phonetics

(1) “Je *ve*” /e/ (instead of “je *vais*” /ɛ/ [I go to...]); (2) “j’*e*” /e/ (instead of “j’*ai*” /ɛ/ [I have ...]); (3) “je ne *se rien*” /ɛ/ (instead of “je ne *sais rien*” /ɛ/ [I don’t know anything]); (4) “il *e*” /e/ (instead of “il *est*” /ɛ/ [It is]); (5) “je *detest()*” (instead of “je *déteste*” [I hate ...]); (6) “je te *present()*” (instead of “je te *présente*” [I introduce you...]); (7) “j’*habit()*” (instead of “j’*habite*” [I live in...]); (8) “je te *embrass()*” (instead of “je t’*embrasse*” [With love]); (9) “je m’*appel()*” (instead of “je m’*appelle*” [My name is...]); (10) “je *sui()*” (instead of “je *suis*” [I am ...]). The learner adapts French-L2 spelling to Spanish-L1 phonetics: atonic morphemes of French present indicative are ignored and the spellings that are pronounced are conserved as in Spanish-L1, hence not respecting the morphological rules of French present indicative.

(A.2.) Verb omission

(11) “Il *()* plus petit” (instead of “il *est* plus petit” [It is smaller...]); (12) “moi *()* seur petit” (instead of “j’*ai* une petite soeur” [I have a little sister]). The learner omits the verb in order to avoid dealing with the morphology of French present indicative.

(A.3.) Interference of another language

(13) “Elle *est* 46 ans” from English-L2 (“she is 46 years old”). The learner adopts the lexical structure of another foreign language.

(A.4.) Borrowing from the mother tongue

(14) “Elles *van*” (instead of “elles *vont*” [They go to...]); (15) “*tengo* 2 seur” (instead of “j’*ai* deux soeurs” [I have two sisters]). The learner avoids dealing with the morphological features of French present indicative by using, instead of the French verb,

the Spanish-L1 verb conjugated in the present indicative.

(A.5.) Use of the French-L2 stem together with the Spanish-L1 morphology

(16) “Je *etudia*” (instead of “j’*étudie*” [I study...]). The learner uses the stem of L2 verb combined with L1 inflection.

The second stage of bilingual acquisition corresponds to coordinate bilingualism, relying on intralingual features. Some examples of French present indicative morphology in the intralingual or coordinate stage are presented below.

(B.1.) Generalization of one of the correct conjugated verb forms

1st person singular: (17) “Je *va*” (instead of “je *vais*” [I go to...]); (18) “je *veut*” (instead of “je *veux*” [I want...]); (19) “je vous *présentez*” (instead of “je vous *présente*” [I introduce you...]); 2nd person singular: (20) “tu *etudie*” (instead of “tu *étudies*” [You study]); (21) “tu *est*” (instead of “tu *es*” [You are...]); (22) “tu *a*” (instead of “tu *as*” [You have]); (23) “tu me *connaissez*” (instead of “tu *connais*” [You have met]); 3rd person singular: (24) “il *vais*” (instead of “il *va*” [He goes...]); (25) “elle *ai*” (instead of “elle *a*” [She has...]); (26) “il *peux*” (instead of “il *peut*” [He can...]); (27) “il *shorts*” (instead of “il *sort*” [He goes out...]); (28) “il *travailles*” (instead of “il *travaille*” [He works]); (29) “elle *aines*” (instead of “elle *aime*” [She likes/loves...]); (30) “ma soeur *as*” (instead of “ma soeur *a*” [My sister has...]); (31) “ma famille *habitent*” (instead of “ma famille *habite*” [My family lives in...]); 3rd person plural: (32) “mes parents *habitons*” (instead of “mes parents *habitent*” [My parents live in...]). The learner generalizes

one of the conjugated verb endings and applies it in situations where he has not yet acquired the required form.

(B.2.) Generalization of one of the correct forms of another verb

(33) “Je *suis* un problème d’argente” (instead of “j’*ai* un problème d’argent” [I have money problems]); (34) “J *a* grand” (instead of “je *suis* grand” [I am tall]). The learner conjugates a verb whose meaning doesn’t fit the context of the sentence—using for example the auxiliary *être* instead of the auxiliary *avoir*—, generalizing a verb form whose morphology is already known to contexts that would require an inflection that has not been consolidated yet. The learner seems to construct only one auxiliary that is used in both situations, before being able to consolidate both conjugations.

(B.3.) Generalization of the 1st-group verbs’ regular morphology:

(35) “Je *finie*” (instead of “je *finis*” [I finish...]); (36) “je te *décrive*” (instead of “je te *décris*” [I describe to you...]); (37) “tu *pouve*” (instead of “tu *peux*” [You can...]); (38) “ils *avent*” (instead of “ils *ont*” [They have...]). The learner uses one of the inflections of the verb group showing the more consistent conjugation—the 1st group—instead of the regular conjugation of a 2nd- or 3rd-group verb, or of an irregular conjugation of those groups as the same with the auxiliaries *avoir* and *être*.

(B.4.) Generalization of a verb category other than the present indicative:

(39) “Je te *ecrive*” (infinitive), (40) “j’*aimé*” (past participle), (41) “j’*esperant*” (gerund). The learner omits the inflection by adopting a verb form whose morphology is less informative than the present indicative since it doesn’t denote mood and person.

(B.5.) Generalization of 3rd-group verbs’ irregular inflections:

(42) “Je *croix*” (instead of “je *crois*” [I think...]). The learner generalizes one of the irregular inflections of 3rd-group verbs, -x, and applies it to a situation where a regular inflection, -s, would be appropriate.

(B.6.) Incomplete application of the rules of a present indicative inflection:

(43) “Nous *somme*”, (44) “nous *somms*”, (45) “nous *soms*” (instead of “nous *sommes*” [We are...]). The learner has only partially constructed the morphology of present indicative, correctly using certain components of it but omitting others.

(B.7.) Ignorance of rule restrictions:

(46) “Il à dix huit anns” (preposition); (47) “elle *et* petit” (conjunction); (48) “ma soeur *ce* très joly”, (49) “*cette* tres petit”, (50) “ma vie *ces* super” (adjective or demonstrative pronoun); (51) j *attente*” (noun). The learner extends the grammatical function of certain words and uses another lexical category than the verb.

(B.8.) Standard features of the target language:

The learner uses the correct forms of French-L2 present indicative.

The study

In this study, we propose that the types of bilingualism show a distribution and proportion specific to each language acquisition stage. The different types of bilingualism could then have different functions during interlanguage development. *Subtractive* bilingualism may be seen as a “port of departure” that still relies on the mother tongue, and *compound* bilingualism, as a laboratory

of exploration, creation and accommodation of hypotheses. *Coordinate* bilingualism, as for it, may be seen as a “port of arrival” where consolidated hypotheses are stored in systematic, conscious and coherent networks.

In this research, we are interested in knowing the proportion of types of bilingualism that characterizes the interlanguage relating to written present indicative for beginning students of French as a foreign language having completed 140 learning hours.

Methodology

Type of study

We developed a study that is *confirmatory* –a study that is trying “to find evidence to support (i.e., confirm) a hypothesis” (Perry, 2011: 85)–; *quantitative* –“the data for this approach are some type of numbers. These numbers can be frequencies, percentage, proportions, rankings, and/or scores on some type of test or survey” (Perry, 2011: 84); and *cross-sectional*– “a comparatively large amount of data is acquired at one given point in time, providing an overview of how a particular variable (or variables) is distributed across a sample at a particular moment in time” (Rasinger, 2008: 36).

Sample

Thirty Mexican university students whose mother tongue is Spanish –19 women and 11 men– were randomly selected from a total population of 238. They were all between 20 and 24 years old and beginning students of French as a foreign language who completed 140 hours of learning, hence allowing a diversity of subtractive, compound and coordinate features to emerge.

Elicitation exercise

A 30-minute elicitation exercise was applied that consisted in writing a 150-word letter to a friend, presenting themselves and their family. In this way, the activity focused on the informative function and gathered the vernacular variant, which is the most systematic and stable. It is worth mentioning that by asking students to talk about them and their family and interact with the recipient of the letter, we intended to motivate them to produce the complete range of present indicative inflections.

Linguistic data were gathered in written form. This decision was based on the fact that most present indicative morphemes are atonic; for this reason, studying the spoken form would not have allowed us to know whether the student omitted these morphemes, or whether they were correctly internalized in the student’s interlanguage, as in the cases of “je m’appelle”, “tu étudies” and “il habite”.

In addition, the phonetic similarity of certain grammatical morphemes would have prevented us to detect when a student was using the infinitive (-er /e/) or past participle (-é /e/) of a 1st-group verb or the 2nd person plural present indicative inflection (ez /e/), given that in spoken French, these three forms are represented by the same phoneme, the closed /e/.

Results

First, we can see that in the act of speaking of interest to this study –identifying and presenting themselves– the student’s discourse is strongly marked by regular 1st-group verbs and auxiliaries, and to a lesser extent by 3rd-group verbs. Second-group verbs are practically absent from it (a single

occurrence), possibly because these verbs were not relevant to the semantic field in question, or because the student preferred to use synonyms from the 1st group (e.g., “je *termine*” instead of “je *finis*”).

We can also see that most students (24 out of 30) used between three and five different person inflections. However, they made a greater use of singular person inflections, especially 1st- and 3rd-person in-

flections. Regarding plural inflections, one third of the students used the 1st and the 2nd person, and about half of them used the 3rd person.

The interlingual (subtractive and compound) and intralingual (coordinate) features were also counted, in accordance with the categories described above in Section IV.2. Results are presented in Table 7 and Figure 1.

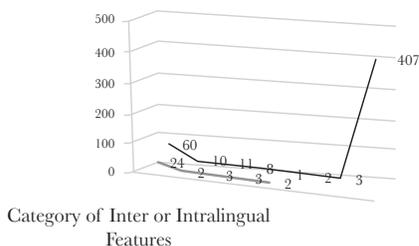
Table 7

Number of Interlingual Features of Subtractive and Compound Bilingualism	%	Number of Intralingual Features of Coordinate Bilingualism	%
A.1: 24	4.4	B.1: 60	11.1
A.2: 2	0.3	B.2: 10	1.8
A.3: 3	0.5	B.3: 11	2.0
A.4: 3	0.5	B.4: 8	1.4
A.5: 2	0.3	B.5: 1	0.1
		B.6: 2	0.3
		B.7: 3	0.5
		B.8: 407	75.9
Total: 34	Total: 6.0	Total: 502	Total: 93.1
			Total: 536 (100%)

Quantification of the Interlingual (Subtractive and Compound) and Intralingual (Coordinate) Features of Bilingualism From an Elicitation Exercise Performed by 30 University Students of French as a Foreign Language According to the Categories Described in Section IV.2.

Figure 1

- Subtractive and Compound Bilingualism (A1, A2, A3, A4, A5)
- Coordinate Bilingualism (B1, B2, B3, B4, B5, B6, B7, B8)



Quantification of the Features of Subtractive/Compound and Coordinate Bilingualism From an Elicitation Exercise Performed by 30 University Students of French as a Foreign Language According to the Categories Described in Section IV.2.

It can be seen that the discourse of students at the end of 140 hours of learning French still contains some linguistic features that are unmarked by present indicative inflections, characteristic of the early stages of interlanguage development; the low proportion of these, however, suggests that they are disappearing (Table 7). It thus seems that at the end of their first semester of French as a foreign language, students are already working at the construction of rules. In other words, at this learning stage of the morphology of French present indicative, both inter- and intralingual features coexist, but the proportions of these in our sample suggest that the student's interlanguage is no longer characteristic of subtractive and compound bilingualism, both relying on the mother tongue, but rather of incipient coordinate bilingualism, with hypotheses that are in the process of consolidating themselves into systematic, conscious and coherent networks.

Regarding interlingual features of subtractive and compound bilingualism, the most commonly used strategy was A.1 (examples (1-10)). Beginning learners tended, in this way, to take the Spanish-L1 phonetics and adapt it to the spelling of French-L2 1st- and 3rd-group verbs and auxiliaries, hence avoiding dealing with present indicative inflections.

The overwhelming presence of present indicative inflections characteristic of coordinate bilingualism is noteworthy in these early stages of French language development, suggesting that interlanguage is evolving towards the target language's standard. Indeed, the most represented intralingual features were B.1 (examples (17-32)) –the generalization of one of the cor-

rect conjugated verb forms–, B.2 (examples (33-34)) –the generalization of one of the correct forms of another verb–, and B.3 (examples (35-38)) –the generalization of the 1st-group verbs' regular morphology to 2nd and 3rd-group verbs and auxiliaries–. Such features indicate that these students are currently constructing the 1st-group verbs' regular system (see examples (19), (20), (28), (29), (31), (32)) and using these strategies to understand the morphology of the 2nd and 3rd-group verbs (see examples (35), (36), (37)), and of the auxiliaries *avoir* and *être* (see example (38)). The overuse of these regular features may be seen as one of the early coordinate strategies that underpin the development of these verbs' inflections.

More specifically, the students' language-construction effort is focused on the 2nd person singular ending of regular 1st-group verbs: to construct these endings, they generalize one of the conjugated verb forms.

The students' language-construction effort is also focused on regular and irregular 3rd-group verbs: to construct them, they generalize one of the forms of another verb or the regular morphology of 1st-group verbs. Regarding the 3rd-group irregular verbs, on a few occasions the students used correct endings of the irregular verb *aller* [to go] (5 cases) and correct endings of the irregular verbs *vouloir* [to desire] and *pouvoir* [to can] (8 cases).

It is worth mentioning that the students used these same strategies (B.2 and B.3) for constructing the morphology of the auxiliaries *avoir* and *être*.

Finally, it is important to highlight the strong presence of standard features relat-

ing to the regular 1st-group verbs, auxiliaries and the 3rd-group verbs such as *aller*, *vouloir* and *pouvoir*. It should be mentioned that of the 407 correct features reported, 278 (68.3%) are of regular verbs, 116 (28.5%) of auxiliaries, and the remaining 13 (3.1%) of irregular verbs.

Data Interpretation

The data provided by this study show that the conjugation most commonly used in French thanks to its wide semantic spectrum, the present indicative, begins to consolidate itself at an early stage of language acquisition, that is, after only 140 hours of lessons.

At this stage, what has been consolidated is essentially the morphology of 1st-group verbs. It can be seen that the student, mirroring the diachronic evolution of the French language, tends to preferably use the regular language features.

On the other hand, it can be seen that at the end of their first semester, the discourse of students still contains some linguistic features that are unmarked by present indicative inflections, but that these tend to disappear and students are already working at the construction of rules and of a marking system.

Regarding the marking system, a parallelism can also be observed between the diachronic evolution of the French language and that of the student's interlanguage. The unmarked features of the universal grammar and early interlanguage, indeed, are similar to Old French features, and the elements of peripheral grammar may resemble those of contemporary French and the interlanguage of advanced students (Chomsky, 2004; White, 2003).

Such an evolution from a regular system to an irregular one, from a system of omission to a marking system, and from subtractive and compound bilingualism to coordinate bilingualism, leads us to think that, as comes out from the discussion about universal grammar, this phenomenon is a reflect of how the human mind proceeds. For this reason, it occurs in the historical evolution of languages as well as in the different linguistic levels of the student's interlanguage.

Conclusion

This study stressed the importance of analyzing bilingual acquisition, given the impact it has on human cognition, described a typology based on neurolinguistics, and showed that the categories of subtractive, compound and coordinate bilingualism translate into acquisitional features of the language system, more specifically of the written morphology of French-L2 present indicative. It would be relevant to develop future research focusing on other structures and other linguistic levels.

The type of study presented here provides data that are relevant to foreign language teaching, as they enable us to understand the natural development of the student's interlanguage and bilingualism.

It is the responsibility of the education sector to reflect on the type of bilingualism susceptible to be developed at school since, from the teacher's point of view based on educational practices, features of the two perspectives described above –some beneficial to cognition, and others detrimental to it– could be found in class. It would also be relevant to ask ourselves how to help develop an ideal bilingualism in the curriculum and the classroom.

A suggestion could be to conceive bilingual programs that apply Ronjat's "one person-one language" approach and promote the ideal **coordinate** and **complete** bilingualism—"equilingualism" or balanced bilingualism—recommended by psychologists and psycholinguists. As pointed out by Deprez (1994), the equilingual individual speaks both languages just as well, has no preference for one language over the other, and never mixes them up. This bilingualism, in turn, favors a well-organized cognitive structure. A teaching program could be conceived where the two languages coexist and are vehicles of cultural, scientific and academic information, highlighting national language and identity.

The teacher in the classroom can organize his teaching around an immersion system to help achieve **coordinate** bilingualism; he or she can refer to level C1 of the Common European Framework of Reference for Languages to help attain **complete** bilingualism; he or she can work with appealing, varied texts that reflect a diverse, pluralistic culture of the second

language to develop **additive** bilingualism; and he or she can create a culturally contrastive teaching approach where both the native and second language have the same status, thereby achieving **egalitarian** bilingualism.

It is relevant and urgent to study and reflect on bilingualism since it has become the norm for the majority of mankind and, and such, is currently a factor promoting social and professional mobility. Bilingualism can also be a driving factor for pluralism and tolerance in the world. Learning, grasping and understanding "the other's" symbolic system is actually a good start to respecting it. Bilingualism can help spread a culture of peace and the spirit of "otherness" (Hagège, 1996). According to Siguan (2001), because they are familiar with several languages, bilinguals are precisely those who can rise above conflicts among those who speak each of these languages, hence opening pathways of mutual understanding. It will thus be up to bilingual or multilingual teachers, thinkers and rulers to build a world of tolerance and solidarity.

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