Generative comparative syntax and language education; with special reference to the teaching of English to Arab and French learners

Received : 07.05.2023 Accepted : 12.06.2023 Published : 30.06.2023

DOI: https://doi.org/10.5281/zenodo.8208497

Ferid Chekili¹ Independent Scholar

Abstract

The paper is an attempt at answering certain questions posed in previous research, in particular, which areas of the L1 grammar pose a problem for the learner. Generative Comparative Syntax- a subfield of linguistic theory- is here, argued to play an important role in answering questions such as these as it reveals the crosslinguistic similarities and differences between the languages under study, and as a result, identifies the L2 aspects to be emphasized in the teaching classroom, and so enables the researcher/teacher to design appropriate teaching materials. In order to highlight the important role comparative syntax plays in language education, two different L1s, French and Arabic, in relation to L2 English are considered. More specifically, two functional categories, namely, pronominals and auxiliaries, in these three languages have been selected to illustrate the contributions of comparative syntax to language pedagogy. These contributions will be seen to yield a number of recommendations and guidelines for teaching English pronouns and auxiliaries to Arab and French learners respectively. It is argued that teaching the syntax of pronominals and auxiliaries will certainly benefit from knowing which properties must be emphasized in the classroom and which properties do not need to be taught. Therefore, based on the description of the syntax of these constructions, the properties to be emphasized and those that do not require teaching are identified.

Keywords: Arabic, auxiliary selection, English, French, null pronominals, object pronouns, resumptive pronouns

1. Introduction

It is now commonly believed that linguistics and pedagogy are closely interrelated. There have been concrete proposals recently that insights from formal linguistics and research in acquisition theory play an important role in language pedagogy (see, for example, De Knop & Gilquin, 2016; Leal & Slabakova, 2019; Marsden & Slabakova, 2018; Slabakova et al., 2020; Trotzke and Kupisch, 2020 and references there; White, 2022 and Whong et al., 2013).

This paper is another potential contribution of formal linguistics to language pedagogy. In view of the now well established role of the L1 in L2 learning - most

¹ The author's research activities and publications have centered around two major areas: (comparative) syntactic theory (and its interfaces), and second language acquisition. More recently, he has become interested in the possible contributions of linguistics and research in acquisition theory to the field of second language acquisition of English and English language education more generally. Contact: feridchekililg@yahoo.fr

generative SLA theories, for instance, make reference to the L1 (see, e.g., Chekili, 2018: 35-37, and references there) and of the implication - never formulated explicitly to the best of my knowledge- that teaching second/foreign languages varies depending on the learner's L1, generative comparative syntax- a subfield of linguistic theory- will contribute even more to language pedagogy as it clearly reveals the cross-linguistic similarities and differences between the languages under study, and, as a result, identifies the L2 aspects to be emphasized in the teaching classroom. As argued by White (2022), although linguistic theory and generative acquisition theory may have nothing to say about how to teach languages, they are certainly helpful in identifying those aspects of language that have to be taught or that do not need to be taught.

As mentioned earlier, the discipline known as pedagogical Linguistics has demonstrated that language education can benefit considerably from knowledge of linguistics and theoretical acquisition research on the part of the teacher. Although the contributions of linguistic theory to language education have been discussed extensively (cf. Chekili, 2021 and references there), the novelty of this piece of research is in using the discipline of generative comparative syntax in order to come up with more detailed and fine-grained comparisons which will allow the research/teacher to identify those properties that must be emphasized and those that needn't be taught. As pointed out by Kayne (2019:11), "in the course of the past fifty or sixty years, our knowledge and understanding of human language syntax has become qualitatively better. Part of that qualitative improvement has come from advances in the subfield of comparative syntax...`. Indeed generative comparative syntax can further contribute to language education by studying «the precise ways in which languages differ from one another (in their syntax). In so doing, it attempts to deepen our understanding of the `parameters` side of the human language faculty.... ». It also «provides us with a new...tool with which to deepen our understanding of the 'principles' side...of the human language faculty » (Cinque et al., 2005: preface; see also Fukui, 2006: 1, for a definition of generative comparative syntax). It, therefore, enables the researcher/teacher to better understand the similarities and differences between the languages under study and consequently, design appropriate instructional materials.

The comparative approach is not new. However, it has usually been studied in the context of language acquisition -both first and second (cf. e.g, Liceras et al. 2008; Rizzi, 2000)- but only secondarily in the form of general implications, in the context of language pedagogy (e.g, Cook, 1994; Dudley & Slabakova, 2020; Shimanskaya & Slabakova, 2017). Dealing with the issue of L1-L2 comparisons, Shimanskaya & Slabakova (2017), for instance, pointed out that, to date, there have been no precise pedagogic recommendations based on L1 transfer effects

and concluded that teachers need to know what areas of the L1 grammar pose a problem for the learner and how to deal with them in the classroom. This paper can be seen as an attempt at answering these questions using the contributions of comparative syntax.

Moreover, the comparison has usually involved one L1 background with the L2. Exceptions include Dudley & Slabakova (2020), Gabrielle & Canales (2011) and Hawkins et al. (2008). In the present study, comparative syntax contributes to language pedagogy by considering two different L1s in relation to L2 English. The advantage of working with two different L1s is that it better illustrates the importance of comparative syntax for language education as it demonstrates how L2 teaching varies according to the particular L1.

As a first step, I would like to illustrate the important role of the L1 in L2 learning, using as an example Tense and Aspect: Dudley & Slabakova (2020), using the Feature Reassembly second language acquisition (SLA) framework (Lardiere, 2009) conducted a study (an oral production task and an interpretation task) investigating the acquisition of aspectual contrasts in the English present tense by French and Chinese learners. The authors came to the conclusion that the French speakers` acquisition task is easier than that of the Chinese speakers. The latter need to remap features expressed covertly in Chinese onto a new lexical item for the habitual interpretation, and additionally, learn that the present simple in English can express several different interpretations. French, on the other hand, is closer to English in this respect: the French `présent` can also express several different interpretations, namely, progressive, habitual and perfective. French speakers, however, must remove the progressive interpretation from the English present simple and map it to a new form, i.e. be V+ing.

The contributions of comparative syntax to language pedagogy will be illustrated using two functional categories, namely, pronominals (overt and null) and auxiliaries. The choice of these functional categories is motivated by observation of the most common errors made by L2 learners in my English language classes. Also, as mentioned by Luigi Rizzi (2000) in his introduction, pronominal systems « offered an obvious case of crosslinguistically variable choice... ». Furthermore, owing to their abstract nature, these categories haven't been covered with sufficient detail in instructional materials. As argued by Shimanskaya & Slabakova (2017), certain contrasts between English and French such as the feature [+_ Human] are not paid enough attention in instructional materials. In fact, owing to the abstract nature of these categories and their properties which will be covered in the next sections, it is unlikely that many teachers are consciously aware of their existence. As argued in Chekili (2021),

as language teachers, we are familiar with these errors which occur frequently in the classroom. Moreover, these difficulties have been widely attested in the literature, even in advanced learners (see, for instance, Callies, 2008 – who argues that advanced learners have a tendency to avoid tough movement constructions; Alroudhan, 2016, in connection with the acquisition of English relative clauses by Arab learners; Cook, 2018, in connection with the acquisition of Gender; Shimanskaya & Slabakova, 2017, in connection with the [+_Human] mismatch).

In this paper, prediction of the difficulties in using these categories and their syntax together with the resulting pedagogical implications is made possible by the results of linguistic theory specifically, the subfield of comparative syntax. They will still need to be confirmed by SLA research and experimentation. (See section 6, below).

Although linguistic theory is not concerned with actual applications in the language classroom, specifically with how to teach the language (Slabakova, 2013; White, 2022), it can still contribute ideas about what to teach. Recommendations/ guidelines for teaching the syntax of English pronominals and auxiliaries to Arab and French learners respectively will, therefore, be made in light of the contributions of generative comparative syntax which, as mentioned earlier, will identify the aspects of the L2 that do not need to be taught together with those requiring instruction. Therefore, based on the description of the syntax of these constructions, the properties to be emphasized and those that do not require teaching are identified. The hypothesis underlying this research may be formulated as follows: the results of comparative syntax will improve researchers` and teachers` awareness of the (absence of) difficulties and hence improve learners` comprehension and performance by devising relevant and appropriate instructional materials.

Section 2 will deal with certain properties of English, French and Arabic direct object pronouns within a comparative approach, and the Arab and French learners` difficulty and ease in acquiring English direct object pronouns. Section 3 will do the same with relative pronouns and resumptive pronouns. In Section 4, the syntax of null pronominals (pro and PRO) will be investigated. Section 5 will deal with copula constructions and auxiliary selection. Section 6 will consider the pedagogical implications and provide relevant recommendations and guidelines. Section 7 is the conclusion.

2. Direct Object Pronouns

A sizeable body of research has been conducted on the acquisition of object pronouns in various languages, including L2 English (e.g. Bruhn de Garavito,

2013; Erlam, 2003; Herschensohn, 2004.; Leal et al. 2016; Shimanskaya, 2015; Shimanskaya & Slabakova, 2014).

2.1. Comparative syntax of Arabic (A) and English (E) (based on Chekili, 2023: 4-5)

As shown in (1), whereas object pronouns are clitics in A², they are strong pronouns in E.

(1) a. shuft-u

saw.1sg-cl TA

b. I saw him

In other cases, the clitic object pronouns in A must be rendered by null pronouns $[\emptyset]$ in E, e.g. in Tough movement constructions (2) and Relatives (2') (see section 3):

(2) a. l-ktaab saahil qrayt-u

the-book easy reading-cl

- b. The book is easy to read Ø
- 2') a. 1-ktaab illi qriit-u

the-book that read.1sg-cl

b. The book that I read Ø

Third, as shown in (3), the pronoun gender distinctions are different in the two languages: biological and grammatical in A; only biological in E:

- (3) a. ktibt-u (l-ktaab) / ktibt-ha (l-qissa) / shuft-u l-wlid/ shuft-ha l-bnayya wrote.1sg-it.msc (the book.msc) / wrote.1sg-it.fem (the story.fem)/ saw him the boy/ saw her the girl
- b. I wrote it (the book/story) / I saw him (the boy)/ I saw her (the girl) Finally, whereas the [+_Human] distinction is absent in A pronouns, it is lexically encoded in E (4):
- (4) a. shuft-u (l-wlid)/ shuft-u (l-fiilim)

saw.1sg-him (the boy) / saw.1sg-it (the film)

b. I saw him / I saw it

Other differences between A and E object pronouns include the following:

- -Whereas A clitic object pronouns cannot stand alone, E object pronouns can:
- (5) a. Question: Shkuun shuft? Answer: *-u. TA
 - b. `Who did you see`? Him. E
- -They may be stressed in E but not in Arabic:
- (6) a. I saw HIM (not her)
 - b. *shuft-U

² Tunisian Arabic (TA) is here taken as representative of Arabic dialects.

- -They may be conjoined in E, but not in Arabic:
- (7) a. *shuft-u w-ha
 - b. I saw him and her
- -They may be used in clefts in E, but not in A:
- (8) a. It's him that I saw
 - b. *-u illi shuft

On top of the differences, there are some similarities between E and A involving object pronouns. For instance, the position of the pronoun in both languages is similar to that of a full DP; in both cases it occupies a postverbal position:

- (9) a. Shuft muHammad / shuft-u
 - Saw.1sg Mohamed. Saw.1sg-him
 - b. I saw John / I saw him

Similarly, in both languages, the object pronoun cannot be separated from the verb:

- (10) a. Nshuuf-u diima / *nshuuf diima -u
 See.1sg-him always See.1sg always-him
 b. I see him often / *I see often him
 - 2.2. Comparative syntax of French (F) and English (E) (based on Shimanskaya, 2015)

Some differences between F and E object pronouns include:

- -Contrary to E, F has both strong and clitic object pronouns. However, only clitic pronouns will be considered as strong pronouns do not usually appear in direct object position (Paradis, 2004).
- -The position of a clitic differs from that of a full DP in F:
- (11) Il a vu Pierre / il l'a vu

He saw Peter. He him saw

- -The pronoun gender distinctions are different in the two languages: biological and grammatical in F; only biological in E, as mentioned earlier:
- (12) a. Je le lis (le livre) / je la lis (l'histoire)

I it.msc read (the book.msc) I it.fem read (the story.fem)

- -The [+_Human] distinction is absent in F pronouns, it is lexically encoded in E:
- (13) a. Je le vois (le garçon) / je le vois (le film) saw.1sg-Cl (the boy) / saw.1sg-Cl (the film)
 - b. I saw him / I saw it
- -Object clitic cannot stand alone in F:
- (14) Q; Qui as-tu vu? A: *le
- -It cannot be stressed:

- (15) Je vais *LE manger
- -It cannot be conjoined:
- (16) *Je vais le et la manger
- -Clefting is only possible with strong pronouns:
- (17) *C`est la que j`ai vu au théâtre

'It's her that I saw at the theatre'

Similarly to E, F clitic objects cannot be separated from the verb:

(18) Je dois parfois le rencontrer/ *Je dois le parfois rencontrer I must sometimes Cl meet. I must Cl sometimes meet

2.3. Summary

On top of certain similarities, several properties of E direct object pronouns contrast with both A and F; these include the observation that E object pronouns:

- -are strong
- -express biological gender only
- -lexically encode the [+_Human] distinction
- -can stand alone
- -may be stressed
- may be conjoined
- -can be used in clefts

Other properties contrast with either A or F:

- -absence of resumptive pronouns (Contrast with A)
- -position of pronoun similar to that of full DP (Contrast with F).

2.4. Predicted Difficulties for A and F learners

As suggested in Chekili (2023), A learners could make errors distinguishing [_+Human], a distinction absent in the L1, and produce (19); they would, initially, have problems dealing with the absence of grammatical gender (20); they would take time discovering absence of clitic pronouns (21); they would have to learn that coordination is possible in English (22):

- (19) *Thanks for your letter, I enjoyed reading her
- (20) *I saw him (the chair) / her (the table)
- (21) *The book is easy to read it
- (22) I saw him and her / *? I saw him and saw her

Similarly, F learners could make Human and position errors and produce such sentences as (23); they would have problems dealing with the absence of grammatical gender (24); they would have to learn that coordination is possible in E (25):

- (23) *I enjoyed her reading
- (24) *I eat him (bread.msc) / *I eat her (apple.fem)
- (25) I saw him and her

3. Relatives and Resumptive Pronouns (RPs)

3.1. Description

In certain languages, an RP is required in certain contexts such as relatives and tough movement constructions, while a wh-trace (t) is disallowed. For instance, RPs are obligatory in Palestinian Arabic direct object, embedded subject and embedded object positions (Shlonsky, 1992). They are also obligatory in Tunisian Arabic (TA) object positions as in relative clauses and tough movement constructions (Chekili, 2016; 2023):

- (1) l-ktaab illi qriit-u Relative The-book that read.1sg-it
- (2) l-ktaab saahil qrayt-u Tough movement The-book easy read-it

Compare with E (3-4) and F (5-6):

- (3) The book which/that I read t / *it
- (4) The book is easy to read t / *it
- (5) Le livre que j`ai lu / *Le livre que je l`ai lu
- (6) Le livre est facile a lire / *Le livre est facile a le lire

I will illustrate this section with object restrictive relative clauses (RRCs) in E, A and F (the E and F descriptions have been adapted from Duffeler (2017):

English:

It is now commonly believed (e.g. Rizzi, 1990) that object RRCs are introduced by a Case-marked relative pronoun or a complementizer and a null relative pronoun (null operator-here \emptyset). The head noun of the RRC originates in the object position of the verb and moves to the front leaving a trace or copy behind (indicated by - in the examples):

- (7) The man [whom/ \emptyset that the girl saw -]
- (8) The book [which/ \emptyset that the lady is reading -]

Both the complementizer and the relative pronoun are optional (the rule is more complex but I am not concerned here with the exact description):

(9) The book $[\emptyset/e]$ the lady is reading -]

The choice between *who* and *which* is determined by whether the head noun is Human or non-Human.

French:

F RRCs are also introduced by a relative pronoun marked for Accusative case, regardless of the animacy of the head noun. Contrary to E, the pronoun may not be omitted:

- (10) L' homme [que la fille a vu-]
 The man whom the girl saw
- (11) Le livre [que la femme lit-]
 The book which the woman reads
- (12) *Le livre la femme lit

Arabic:

TA uses an invariant form *illi* independently of Human, Gender or Number distinctions. Instead of a trace, a RP appears in the object position of the verb. The relative pronoun/complementizer may not be omitted:

- (13) l-raajil illi l-wild Shaaf-u The-man that the-boy saw-him
- (14) l-ktaab illi l-mra qraat-u The-book that the-woman read-it
- (15) *l-ktaab l-mra graat-u

3.2. Analysis of RP vs. trace

A number of researchers have attempted to find explanations for why certain languages display operator movement in RRCs while others use RPs instead: For instance, as mentioned in Chekili (2016), following a proposal by Rizzi (1990), the feature [wh] is present in English in the form [-+wh] but absent in languages with resumptive pronouns. [wh] triggers the movement of the wh-element or the null operator (Op) to the specifier of CP; when [wh] is absent, a resumptive pronoun occupies the position from which a wh-element has moved in English (see, e.g. Shlonsky, 1992). This is illustrated below, using the features [wh] and [pred] (predicate), the latter distinguishing relative clauses from other types of clauses (analysis suggested by Rizzi, 1990: 67):

- (16) a. [NP the book [CP whichi [+wh] [C' Ø [+wh,+pred] [IP I read [NP ti.....]]]]]]]
- (17) b. [NP the book [CP Opi [wh] [C' that [-wh,+pred] [IP I read [NP ti.....]]]]]]]
- (18) c. [NP the book [CP Opi [wh] [C' Ø [+wh,+pred] [IP I read [NP ti.....]]]]]]
- (19) [NP l-ktaab [CP Ø [C' illi [Øwh,+pred] [IP qriit-u....]]]]]

Similarly, Hawkins & Chan (1997) propose that operator movement is triggered by "a particular specification of the functional features of predicative C" (197). They argue that the [wh] feature of C is strong in E, triggering the movement of an (overt or null) operator to the specifier of CP. They also suggest that contrary to the English complementizer which is specified for the whfeature, the Chinese predicative complementizer *de* is unspecified for that feature which explains the absence of operator movement in Chinese (198).

Building on Chomsky's (1977, 1991) argument that the rule responsible for RPs is a last resort operation which is language-specific and blocked whenever a universal strategy such as movement is available, Shlonsky (1992) argues that the parametric difference between languages with RPs and languages without is lexical: the complementizer, in the first type of languages, has "certain properties that severely restrict syntactic wh-movement; English lacks such complementizers (443)."

Similarly, Grolla (2005), using a more recent framework (Chomsky, 1995) argues that "the non movement option (where the RP is present) will only be applied if movement is blocked by some constraint. In this case, both the RP and its binder are inserted into their surface positions at d-structure." (73)

3.3. Predicted Difficulties for A and F learners

Some researchers have argued for the difficulty of acquiring the feature specification of the E relative C by L2 learners. In particular, several SLA studies have demonstrated the difficulty of omitting RPs in E and the continuing use of RPs in their interlanguage (see, for instance, Shaheen, 2013 in connection with A learners of E, and Prentza, 2012 in connection with Greek).

Possible errors made by A learners include:

- -non omission of resumptive pronouns:
- (20) *The book that I read it / *The book is easy to read it -confusing *who* with *which*:
 - (21) *The book who I read it
- -incorrectly ruling out:
 - (22) The book the lady is reading

Possible errors made by F learners include:

- -confusing who with which:
 - (23) *The man which the girl saw / *The book who the woman is reading
- -incorrectly ruling out:
 - (24) The book the lady is reading

4. Null Pronominals

4.1. pro

The pro drop (null subject) parameter is one of the most studied parameters within generative comparative syntax work. Theories dealing with null subjects include Chomsky (1981), Huang (1984), Jaeggli & Safir (1989), Speas (1994) and many others. Pro drop languages do not pronounce their unstressed pronominal subjects contrary to non-pro drop languages which do. Compare TA with E:

(1) pro kla tuffaaHa.

Ate an.apple

(2) *pro ate an apple

Huang (1984) for instance, concludes that pro drop is licensed by the existence of rich inflection (e.g. Persian, Portuguese), or the absence of inflection (e.g. Japanese, Chinese), but not by impoverished inflection (English, French).

This parametric difference between pro drop and non-pro drop languages has been argued to be connected to other syntactic differences. Several correlations have been proposed in the literature (see, e.g., Rizzi, 1982, 1986, 2004), however, only a few, namely, the possibility of having referential null subjects, free inversion, no expletive subjects and no that-trace effects have generally been recognised. Compare E, F and A:

- (3) a. Kla tuffaaHa
 - b. *(he) ate an apple
 - c. *(il) a mangé une pomme
- (4) a. Kla l-wild tuffaaHa
 - b. *ate the boy an apple
 - c. *a mangé le garçon une pomme
- (5) a. L-shta tSubb

The-rain pours

- b. It is raining
- c. Il pleut
- (6) a. L-raajil i illi ndhun t i illi t i baash yji
 - b. *The man i who I believe t i that t i will come
- c. *L`homme i que je crois t i que t i viendra (example from Rizzi, 1990, p. 56)

4.1.1. Predicted Difficulties for A and F learners

As mentioned in Arnaus et al. (2021: 4), the extraction of subjects in that-t contexts (more so than expletives and inversion) " seems to act as a trigger in first language acquisition" as this is not allowed in non-null subject languages. They suggest that, whereas this construction is present in the input of the Italian

child, it is not, however, found in the input of the French child as it is ungrammatical and hence cannot act as a trigger. They conclude that the setting of the parameter to the value [+pro drop] would be expected to be earlier than to the value [-pro drop]. In our study, and extrapolating from L1 to L2 acquisition, this would imply difficulty in acquiring the non-pro drop value.

Similarly, Wakabayashi (2002: 35), following Speas (1994) suggests that learners with Spanish-type languages, i.e. languages in which null subjects are identified through verbal inflection (Huang, 1984) have to `delearn` their L1 grammar before learning the L2 grammar of an English-type language. This results in difficulty.

In the same vein, other researchers such as Field (2004) argue that it is easier to learn pro drop languages than non-pro drop ones.

Finally, comparing the two types of null subject languages, Toribio et al. (1992) found that Asian learners were better at discovering the absence of null subjects in English than Romance learners of English.

Possible errors made by A learners include:

- (7) *ate an apple
- (8) *ate John an apple
- (9) *is raining / *the rain falls / *arrived John
- (10) *the man who I believe that will come

F is similar to E in this respect (both languages are non-pro drop). Therefore, no important difficulties are anticipated for the F learner.

4.2. PRO and Control

E non-finite clauses without an overt subject are assumed to have non-finite null subjects. Chomsky (1981) calls this empty category PRO (big pro). PRO is a base-generated null DP. Chomsky & Lasnik (1993) argue that it has null Case (in E). A complement clause with a null PRO subject is known as a control clause. Examples:

- (11) Peter promised [PRO to quit smoking]
- (12) John persuaded Bill [PRO to quit smoking]
- (13) It is difficult [PRO to learn a new language]

Control theory has been investigated by several researchers such as Boekx & Hornstein (2003), Chomsky (1965), Hornstein (1999), and others.

4.2.1. Comparative Syntax of F, A and E

-A:

Whether A has PRO and control or not is the subject of an ongoing debate. Some (e.g. Albaty & Ouali, 2018; Jalaneh, 2022) maintain that it does as it also has nonfinite categories, including Gerunds and Subjunctives. Others (e.g. Al-

Kajela, 2015; Farhat,1991; Haddad, 2006) argue that it does not. Haddad, for instance, using Hornstein's (1999) diagnostics, argues for the absence of control in A, and concludes that the embedded null subject is small pro. Similarly, Al-Kajela (2015), applying Williams's (1980) diagnostics to Standard Arabic (SA), and basing his argument on the fact that A has no infinitives and a rich system of phi-features, argues that "instead of PRO, SA has pro which occupies the position of the null subject in the embedded clause" (37).

-F:

French, on the other hand, is similar to E in this respect (despite a few differences such as the type of controller) as it also has PRO in nonfinite clauses (including infinitives) without an overt subject (see, e.g., Helland, 2010; Kayne, 1981); examples:

- (14) Jean a essayé /oublié /décidé PRO de partir (adapted from Kayne (1981)
- (15) Il aimerait PRO arrêter de fumer

4.2.2. Predicted Difficulties for A and F learners

Few studies (to the best of my knowledge) have been conducted on the acquisition of control by non-native speakers of E, and none, by Arab learners. For research on Japanese learners, see, e.g. Nakayama et al. (2016).

Assuming, as mentioned earlier, that PRO in A is treated as pro, and given that learners of pro drop languages have difficulty acquiring the non-null subject setting (see previous section), TA learners, at different stages of their acquisition, may produce instead of *I want PRO to go:*

(16) pro want pro go/ I want pro go/ I want that I go/ I want me go/ I want me to go/ I want PRO to go.

Consequently, learners must learn the conditions for PRO, in particular, the fact that control verbs require nonfinite clauses with null subjects.

They will also have some trouble learning the form of the E infinitive.

French learners, on the other hand, are predicted to have no difficulty acquiring E PRO.

5. Copula and Auxiliary Selection

- 5.1. Copula
 - 5.1.1. Comparative Syntax of F, A and E

It is generally assumed (Alharbi, 2017, Aoun et al. 2010, Benmamoun, 2000, Steiner, 2019) that A copula constructions with present tense interpretation involve a null copula in predicational constructions (but see Camilleri et al., 2019)

for a more comprehensive description). F copula constructions on the other hand require an overt copula in these contexts. Examples of predicational copula constructions in the three languages:

- (1) a. John is clever
 - b. John is a teacher
 - c. The children are in the garden
- (2) a. Jean est intelligent
 - b. Jean est professeur
 - c. Les enfants sont dans le jardin F
- (3) a. Nebil dhkii

Nebil clever

b. Nebil ustaadh

Nebil teacher

c. L-awlaad fi l-jniina.

The-boys in the-garden.

TΑ

5.1.2. Predicted difficulties for F and A learners

F learners only have to learn the form of the E copula, hence not much difficulty is anticipated. A learners, on the other hand, are predicted to produce such ungrammatical sentences as:

- (4) *John clever/ *John a teacher/ *The children in the garden
- 5.2. Auxiliary Selection (based on Kayne, 2019: 33 ff.)

In F, similarly to E, past participles are preceded by auxiliary (Aux) verb *have* or *be*. In E (5), in most cases, it is *have*; *be* is only used in passive and in adjective-like uses. In F (6), however, *be* is also used with verbs such as the counterparts of *arrive*, *leave*, *enter...*:

- (5) a. The cat has seen the dog
 - b. The dog is feared by the cat
 - c. The student has/*is left for Paris
 - d. The cat is gone
- (6) Marie est/*a arrivée hier

Note that F Aux+ Participle constructions are sometimes translated by the simple past in E.

In anti-causatives, verbs like *melt*, *sink*, *freeze...* occur in alternations such as:

- (7) The storm has sunk the boat
- (8) The boat has sunk

In both E and F, such verbs take Aux *have*. Moreover, the subject in (8) is generally taken to be an underlying object.

A has no auxiliaries comparable to those of E and F. E constructions with auxiliaries can be translated either by the perfect aspect or a participle in A:

(9) l-kalb Shaaf l-qaTTuus

The-dog see.Perf the-cat

(10) l-kalb khaayif mi l-qaTTuus

The-dog frighten.participle from the-cat

Kayne (36) argues that alternations such as the one in (7-8) can be analyzed in the same way in all languages: they all contain silent elements (in capital letters), namely, the counterparts of E CAUSED and FROM SOMETHING. For instance, (8) would correspond to *something has made the boat sink*, and therefore, Kayne argues, a more specific proposal would be to analyze (8) and similar sentences in other languages as:

(11) The boat has (CAUSED) sunk (FROM SOMETHING)
Kayne further argues (37) that if the analysis is "the only type of analysis... made available by the language faculty ", the learner will have no problem discovering the silent elements.

5.2.1 Predicted Difficulties for F and A learners

Regarding sentences such as `the boat has sunk`, and if Kayne`s argument above is correct, then neither the F nor the A learners are predicted to have difficulties interpreting them.

French:

Learners have to learn that with certain verbs, E uses *have* not *be.* Possible mistakes include:

- (12) *He is arrived
- Similarly, they have to learn that F *have/be* are often translated by E simple past; a possible mistake:
 - (13) *He has arrived yesterday

With regards to anti-causatives, they only have to learn that while E uses the same form of the verb in the alternation (7-8), namely, has sunk, F uses a periphrase in the first part of the alternation (la tempête a fait couler le bateau vs. Le bateau a coulé).

Arabic:

Learners have to learn that E has auxiliary verbs *have* and *be* rather than perfect aspect or participle. They also need to learn when to use *have* and when to use *be*. With regards to anti-causatives, they only have to learn that while E uses the same form of the verb in the alternation (7-8), namely, *has sunk*, A uses two

different forms of the verb (*l-Taqs gharraq l-babuur -the weather has sunk.causative the boat-* vs. *L-babuur qhruq -the boat has sunk*).

6. Pedagogical Recommendations and Guidelines

6.1 Introduction

Although the concern of the present research is only with the contributions of comparative syntax, the predicted difficulties (above) will gain more plausibility when confirmed by relevant empirical evidence provided by SLA research and experimentation. Several of these difficulties have been confirmed by findings from acquisition research (see, e.g. Shimanskaya & Slabakova, 2017 in connection with the Human property), however, some remain to be confirmed. SLA findings will need to confirm, for instance:

- -whether the contrasts, revealed by comparative syntax, between A and E on the one hand and F and E, on the other, are indeed challenging as predicted, causing the A/F learner to experience difficulties.
- -whether knowledge of these contrasts, on the part of the teacher, will improve the L2 learning situation.
- -one implication of the present research is that an E language curriculum designed for F learners cannot be used with A learners (as it wouldn't, for example, focus on the absence of RPs) and vice versa. This implication will also need to be verified.

6.2 What to Teach

Knowledge of the relevant contrasts revealed by comparative syntax on the part of the teacher/researcher will enable the latter to focus on the problematic areas and devise more appropriate instructional materials.

In what follows, recommendations/guidelines with regard to what to teach and what to leave untaught will be outlined, based on the comparative syntax of pronominals and auxiliaries described in the preceding sections. As mentioned in the introduction, although linguistic theory is not primarily concerned with actual applications in the language classroom, specifically with how to teach the language (White, 2022), it can still contribute ideas about what to teach. In view of the SLA claim that ease/difficulty of the mapping tasks depends on correspondences in meaning or grammatical function (cf. Gil & Marsden, 2013), the similarities between the languages in contrast do not pose much difficulty. Neither do those properties deriving from universal principles. Independently of questions relating to the (non) availability of UG in SLA and of models of access to UG in L2 learning (cf. Cook, 1994; Farahani et al. 2014), it is clear that there are many properties common to many/all languages, as well as properties that are language-specific. It is also clear that the universal principles are not learnt

hence do not need to be taught, whereas the language-particular properties require teaching. Consequently, instructional materials and teachers must place more emphasis on the differences revealed by comparative syntax.

6.2.1 Direct object pronouns

Several properties of E direct object pronouns must be stressed for both types of learners, while others may be left untaught or may require very little teaching:

E properties that needn't be taught to A learners:

-Given the principles of X´-bar theory and the parameter determining linear order- i.e., complements follow heads in both A and E- and assuming that the same innate mechanisms underlying grammar-building in L1 acquisition are also present in L2 acquisition (White, 2003), very little learning (and teaching) would be required to account for the position - postverbal- of E direct object pronouns.

-The same universal principle and parameter, in addition to case requirements, also account for why the direct object pronoun cannot be separated from the verb.

This (last) property also applies to French learners.

E properties that must involve explicit teaching to A learners:

-A learners must be taught the obligatory absence of RPs in certain constructions (see below 6.2.2).

E properties that must involve explicit teaching to F learners:

-Whereas the general order of phrases is similar in both F and E, F clitics show an idiosyncratic ordering, occupying a preverbal position. This means that the F learners need to `unlearn` this property of French and treat E direct object pronouns similarly to F non-pronominal objects. Positive evidence in the L2 wouldn't show that constructions with preverbal pronouns are incorrect. Therefore, teaching (negative evidence) would be required.

E properties that must involve explicit teaching to both A and F learners:

-Comparative syntax has identified two distinct classes of pronouns, namely, strong and weak or deficient (Cardinaletti & Starke,1999). E direct object pronouns can be classified as strong as they are not subject to the same constraints as weak clitic objects: they can be used in coordination structures, can stand alone, can be stressed, can occupy peripheral positions such as clefts, left and right dislocations. A and F learners have to learn these properties of E

pronouns. Assuming transfer from the L1, these would be seen as grammatically incorrect by the learner. Consequently, both A and F learners have to be taught these properties of strong pronouns.

-As A and F instantiate both biological and grammatical gender, when learning E (a language with only biological gender), A/F learners will need to remove the grammatical option from E object pronouns. Positive evidence of *I saw it (the chair)* wouldn't be sufficient to exclude *I saw her (the table)*. Therefore, teaching is required.

-With the HUMAN property, we find the reverse situation, where A and F constitute a subset of E. A/F learners will need to learn that E object pronouns lexically encode the human/non-human feature. Again positive evidence alone is not sufficient because of poverty of the stimulus: hearing *I* saw it (the film) does not exclude the possibility of *I* saw him. Teaching is therefore required.

6.2.2 Object Relatives and Resumptive Pronouns

Properties that do not need to be taught to A and F learners:

-Head-initial languages usually place the relative clause after the head³. This means that assuming that the learner is aware that their language is head-initial, then, in principle, they wouldn't have any difficulty with the order of pronoun and head.

Properties to be emphasised to A learners include:

- -Comparative syntax has identified two different ways of forming relatives, namely, movement and RP. Given the A learners` difficulty of omitting RPs in E-positive evidence such as *the book that I read* wouldn`t show that *the book that I read it* is incorrect- teachers/instructional materials must focus on this point, i.e. insist on the obligatory absence of RPs in relative clauses; they also need to emphasize several E-particular properties, including the fact that:
- -E has several relative pronouns;
- -who and which are used in different contexts;
- -the pronoun may be omitted.

Properties that do not need to be taught to F learners:

-The movement vs. RP option as F is similar to E in this respect.

Properties to be emphasised to F learners include:

- -que corresponds to several different pronouns;
- -who and which are used in different contexts;

³ However, this order can also be found in OV languages (see, e.g., de Vries, 2018)

-the pronoun may be omitted.

6.2.3 Null Pronominals

Pro:

Properties to be emphasised to A learners include:

- -as pro drop learners have difficulty acquiring the non-pro drop setting (see above), teaching must emphasize the obligatory presence of preverbal subject pronoun: positive evidence of *he bought a car*, for example, wouldn't show that *bought a car* is incorrect. Without going into the debate about whether it is sufficient to teach one property of a cluster for the other properties to follow (e.g. Slabakova, 2016), teaching must also emphasize:
- -the obligatory absence of postverbal subject; this is a clear case of `indirect negative evidence` (Gass, 1997) as it does not occur in the input;
- -the possibility of expletive subject pronouns: the fact that certain types of verbs take an overt expletive subject;
- -that-trace effects: positive evidence of *the man who I believe will come* would not exclude sentences such as **the girl who John says that he met.*

Properties to be emphasised to F learners:

-no specific teaching is required

PRO:

Properties to be emphasized to A learners include:

-In A as in E, two clauses are involved in control with the second clause being nonfinite. As the form of nonfinite clauses (in particular, infinitives) is different in the two languages, teaching would be necessary to explain the form of the E infinitive.

Properties to be emphasised to F learners include:

-no specific teaching required as F, like E has uninflected infinitives.

Properties that do not need to be taught to A and F learners:

An overt subject in the nonfinite clause is excluded by general principle (cf.e.g., Hyams & Orfitelli, 2015 in the context of L1 acquisition). Therefore, it must be null - pro or PRO (see above). Compare:

- 1. YHib [*huwa/ PRO yukhruj]
- 2. He wants [*he/ PRO to leave]
- 3. Il veut [*il/ PRO sortir]

6.2.4 Copula and Auxiliary Selection

Copula:

Properties to be emphasised to A learners include:

-obligatory copula due to poverty of the stimulus: positive evidence of *John is a teacher* doesn't exclude the possibility of *John clever*.

Properties to be emphasised to F learners include:

-no teaching is required.

Auxiliary Selection:

Anti-causatives, with the exception of the form of the verb (see above) needn't be taught to either learner.

Properties to be emphasized to A learners include the fact that:

- -E has auxiliary verbs;
- -have and be have a different distribution.

Properties to be emphasised to F learners include:

- -with certain verbs, E uses *have* instead of F *be*; positive evidence of *he has left* doesn't exclude *he is arrived*.
- -F have and be are often translated by E simple past. He arrived yesterday doesn't exclude producing he has left last month.

7. Conclusion

In this research, an attempt has been made at highlighting the important role generative comparative syntax plays in language education. This was achieved by considering two different L1s, namely, Arabic and French in relation to L2 English. More specifically, two English functional categories, pronominals and auxiliaries were compared with, on the one hand, Arabic and on the other, French, yielding different guidelines/recommendations for teaching the syntax of English pronominals and auxiliaries to Arab and French learners respectively. The comparison yielded a comprehensive list of those properties that have to be taught and those properties that do not need to be taught. The guidelines/recommendations were made solely on the basis of linguistic theory and the subfield of generative comparative syntax. They will gain more plausibility when confirmed by research and experimentation in SLA.

References

Albaty, Y. & Ouali, H. (2018). Restructuring and control in Arabic. *Brill's Journal of Afroasiatic languages and linguistics* 10. 1-30

Alharbi, B. Y. (2017). *The syntax of copula clauses in Arabic.* University of Wisconsin, Milwaukee dissertation

- Al-Kajela, A. (2015). PRO theory. Word, 61:1, 25-38
- Alroudhan, H. E. (2016). The acquisition of English restrictive relative clauses by Arab adult EFL learners. Advances in language and literary studies, 7(1)
- Aoun, J. E., Benmamoun, E. & Choueiri, L. (2010). *The syntax of Arabic*. Cambridge: Cambridge University Press
- Arnaus, L.G., Stahnke, J. & Muller, N. (2021). On the acquisition of French (null) subjects and (in)definiteness: simultaneous and early sequential bi-, tri- and multilingual. *Probus* 2021.
- Benmamoun, E. (2000). The feature structure of functional categories: A comparative study of Arabic dialects. Oxford University Press
- Boekx, C. & Hornstein, N. (2003). Reply to ``control is not movement``. Linguistic Inquiry 11, 203-38
- Bruhn de Garavito, J. (2013). What research can tell us about teaching: the case of pronouns and critics. In M. Whong, K. H. Gil & H. Marsden (eds). *Universal grammar and the second language classroom:* 17-34. Berlin: Springer
- Callies, M. (2008). Easy to understand but difficult to use? Raising constructions and information packaging in the advanced learner variety. In G. Gilquin, M. B. Diez-Bedmar, and S. Papp (eds.), Linking contrastive and learner corpus research. Amsterdam: Rodopr. https://doi.org/10.1163/9789401206204_009
- Camilleri, M. & Sadler, L. (2019). The grammaticalisation of a copula in vernacular Arabic. *Glossa: a journal of general linguistics* 4(1): 137
- Cardinaletti, A., & Starke, M. (1999). The typology of structural deficiency: A case study of The three classes of pronouns. In H. Van Riemsdijk (Ed), Clitics in the Languages of Europe, 145–233. Walter de Gruyter. https://doi.org/10.1515/9783110804010.145
- Chekili, F. (2016). Variability in L2 Acquisition: Investigating the Role of Formal Features. *Arab World English Journal (AWEJ)*. Volume 7, Number 2
- Chekili, F. (2018). A closer look at L1 transfer: a feature-based approach. *Journal of Second and Multiple Language Acquisition – JSMULA.* Vol: 6, Issue: 2, 35-59.
- Chekili, F. (2023). Teaching English to Arab Learners: The Role of Abstract Linguistic Knowledge. *Pedagogical Linguistics* 4:1, pp. 98-117. John Benjamins Publishing Company.
- Chomsky, N. (1965). Aspects of the theory of syntax. Cambridge, MA: MIT Press
- Chomsky, N. (1977). On wh-movement. In P. Culicover, T. Wasow & A. Akmajian (eds.). *Formal syntax*. Academic Press, New York
- Chomsky, N. (1981). Lectures on government and binding. Dordrecht,

- Netherlands: Foris
- Chomsky, N. (1991). Some notes on economy of derivation and representation. In R. Freidin (ed.), *Principles & parameters in comparative grammar*. MIT Press, Cambridge, Mass.
- Chomsky, N. (1995). The minimalist program. Cambridge, MA: MIT Press
- Chomsky, N. & Lasnik, H. (1993). The theory of principles and parameters. In J. Jacobs, A. Von Stechow, W. Sternefeld & T. Venne Ann (eds.). *Syntax: an international handbook of contemporary research, 506-69. Berlin: Walter de Gruyter*
- Cinque, G. & Kayne, R.S. (Eds.). (2005). *Comparative syntax*. Oxford University Press
- Cook, V. (1994). Universal grammar and the learning and teaching of second languages. In T. Online (ed.), *Perspectives on pedagogical grammar. CUP*, 25-48
- Cook, S.-V. (2018). Gender matters: from L1 grammar to L2 semantics. Bilingualism: language and cognition, 21(1), 13–31. https://doi.org/10.1017/S1366728916000766
- De Knop, S. & Gilquin, G. (2016). Applied construction grammar. De Gruyter Mouton. https://doi.org/10.1515/9783110458268
- De Vries, M. (2018). *Relative clauses in syntax*. Oxford Research Encyclopedia of Linguistics.
- Dudley, A. & Slabakova, R. (2020). Aspectual contrasts in the English present tense revisited. Exploring the role of input and L1 influence. In *Pedagogical linguistics*, 1(1), 66–93. https://doi.org/10.1075/pl.19010.dud
- Duffeler, M-A. C.M. (2017). The comprehension of relative clauses by Romance learners of English: syntactic and semantic influences. Lot Publications
- Erlam, R. (2003). The effects of deductive and inductive instruction on the acquisition of direct object pronouns in French as a second language. *The Modern Language Journal*, 87, 242-260
- Farahani, A.A.K., Mehrdad, A.G. & Ahghar, M.R. (2014). Access to UG in adult second language acquisition. *Procedia-Social and Behavioural Sciences* 136, 298-301
- Farhat, H. (1991). *Empty categories in Syrian Arabic*. Unpublished doctoral dissertatation. Bangor University
- Field, J. (2004). *Psycho linguistics: the key concepts.* Routledge, London, UK Fukui, N. (2006). *Theoretical comparative syntax. Studies in macroparameters.* Routledge
- Gabriele, A., & Canales, A. (2011). No time like the present: Examining transfer at the interfaces in second language acquisition. *Lingua*, 121(4), 670–687.
- Gass, S. (1997). Input, interaction and the second language learner. Mahwah,

- NJ: Lawrence Erlbaum
- Gil, K.-H. and Marsden, H. (2013). Existential quantifiers in second language acquisition: A feature reassembly account. *Linguistic Approaches to Bilingualism*, 3, 117–149. https://doi.org/10.1075/lab.3.2.01gil
- Grolla, E. (2005). Resumptive pronouns as last resort: implications for language acquisition. *University of Pennsylvania working papers in Linguistics*, vol. 11:Iss.1
- Haddad, Y. A. (2006). Control in Lebanese Arabic. *Variation in control structures* project
- Hawkins, R. & Chan. C. (1997). The partial availability of universal grammar in second language acquisition: the 'failed functional feature hypothesis'. *Second Language Research* 13, 187-226.
- Hawkins, R., Casillas, G., Hattori, H., Hawthorne, J., Husted, R., Lozano, C., Yamada, K. (2008). The semantic effects of verb raising and its consequences in second language grammars. In J. Liceras, H. Zobl, & H. Gooluck (Eds.), *The role of formal features in second language acquisition*, 328–351. New York, NY: Taylor & Francis.
- Helland, H.P. (2010). Control in a cross-linguistic perspective: French-Norwegian. *Linguisticae Investigationes*, vol. 33, Iss. 2: 194-207
- Herschensohn, J. (2004). Functional categories and the acquisition of object clitics in L2 French. In P. Prevost & J. Paradis (eds.). *The acquisition of French in different contexts: focus on functional categories: 207-242.*Amsterdam: John Benjamins
- Hornstein, N. (1999). Movement and control. *Linguistic Inquiry* 30, 69-96 Huang, C-T.J. (1984). On the distribution and reference of empty pronouns. *Linguistic Inquiry* 15, 531-574
- Hyams, N. & R. Orfitelli (2015). The acquisition of syntax. In H. Cairns & E. Fernandez (eds.). *Handbook of Psycholinguistics*. Wiley/Blackwell Publishers.
- Jaeggli, O. & Safir, K. (Eds.). (1989). The null subject parameter. Dordrecht: Kluwer
- Jalabneh, A.M. (2022). PRO vs pro in Arabic syntax: theoretical analysis. Theory and Practice in Language Studies, vol. 12, No. 7: 1271-1277
- Kayne, R.S. (1981). On certain differences between French and English. Linguistic Inquiry, vol. 12, No. 3: 349-371
- Kayne, R.S. (2019). Questions of Syntax. Oxford University Press
- Lardiere, D. (2009). Some thoughts on the contrastive analysis of features in L2 acquisition. *Second Language Research*, 25, 173–227. https://doi.org/10.1177/0267658308100283

- Leal, T., Slabakova, R. Ivanov, I., & Tryzna, M. (2016). Uninterpretable features in L2A again: Interrogatives in the L2 English of Kuwaiti Arabic speakers. In D. Stringer et al. (eds.), *Proceedings of the 13th generative approaches to second language acquisition conference (GASLA 2015)*, 101–112. Somerville, MA: Cascadilla Proceedings Project.
- Leal, T. & Slabakova, R. (2019). The relationship between L2 instruction, exposure, and the L2 acquisition of a syntax-discourse property in L2 Spanish. *Language Teaching Research*, 23(2), 237–258. https://doi.org/10.1177/1362168817745714
- Liceras, J.M., Zobl, H. & Goodluck, H. (Eds.). (2008). The role of formal features in second language acquisition. Lawrence Erlbaum Associates
- Marsden, H. & Slabakova, R. (2018). Grammatical meaning and the second language classroom: Introduction. *Language Teaching Research* 2019, 23(2), 147–157. https://doi.org/10.1177/1362168817752718
- Nakayama, M., Yoshimura, N. & Fujimori, A. (2016). Control constructions by Japanese speaking learners of English. *Kyushu university papers in linguistics* 36: 239-253
- Paradis, J. (2004). The relevance of specific language impairment in understanding the role of transfer in second language acquisition. *Applied Psycholinguistics*, 251, 67–82.
- Prentza, A. (2012). Second language acquisition of complex structures: the case of English restrictive relative clauses. *Theory & Practice in Language Studies*, vol. 2, No. 7: 1330-1340
- Rizzi, L. (1982). Issues in Italian syntax. Dordrecht: Foris
- Rizzi, L. (1986). Null objects in Italian and the theory of pro. *Linguistic Inquiry* 17, 501-557
- Rizzi, L. (1990). Relativized minimality. Cambridge, Mass: MIT Press
- Rizzi, L. (2000). Comparative syntax and language acquisition. Routledge
- Rizzi, L. (2004). On the study of the language faculty: results, developments & perspectives. *Linguistic review* 21 (3-4): 323-344
- Shaheen, B. (2013). A comparative study of restrictive relative clauses in Latakian Syrian Arabic & English restrictive relative clauses by first language speakers of Latakian Syrian Arabic. Doctoral dissertation, University of Essex
- Shimanskaya, E.-M. (2015). Feature reassembly of semantic and morphosyntactic pronominal features in L2 acquisition. PhD (Doctor of Philosophy) thesis. University of Iowa. https://doi.org/10.17077/etd.p1k1k73b
- Shimanskaya, E.-M. & Slabakova, R. (2014). Re-assembling Objects: a New Look at the L2 Acquisition of Pronominal Clitics. *BUCLD*, 38. Cascadilla

Press.

- Shimanskaya, E.-M. & Slabakova, R. (2017). L1-L2 differences in the L2 classroom: anticipating anglophone learners' difficulties with French pronoun interpretation. *Teaching Research*, 23(2), 259–277. https://doi.org/10.1177/1362168817739650
- Shlonsky, U. (1992). Resumptive pronouns as a last resort. Linguistic Inquiry, 23, No. 3, 443-468.
- Slabakova, R. (2013). What is easy and what is hard in second language acquisition: a generative perspective. In Maria del Pilar Garcia Mayo, Maria Junkal Gutierrez Mangado & M.Martinez Adrian (eds.), Contemporary approaches to second language acquisition. John Benjamins Publishing Company
- Slabakova, R. (2016). The parameter of aspect in second language acquisition. Second Language Research. Vol. 15, iss. 3
- Slabakova, R., Leal, T., Dudley, A. & Stack, M. (2020). *Generative second language acquisition (Elements in second language acquisition)*. Cambridge: CUP. https://doi.org/10.1017/9781108762380
- Speas, M. (1994). Null arguments in a theory of economy of projections. In Benedicto, E. & Runner, J. (Eds.). Functional projections. University of Massachusetts Occasional papers 17, 179-208
- Steiner, J. (2019). Acquisition of the English copula by Arabic speaking ESL learners: Evidence for feature reassembly. Doctoral dissertation, University of South Carolina
- Toribio, A. J., Roebuck, R. & Lantolf, J. P. (1992). On the role of UG in adult second language acquisition: evidence from missing subjects. *Paper presented at the annual meeting of the linguistic society of America*, LA, CA
- Trotzke, A. & Kupisch, T. (2020). Formal Linguistics and Language Education: New Empirical Perspectives. Cham: Springer. https://doi.org/10.1007/978-3-030-39257-4
- Wakabayashi, S. (2002). The acquisition of non-null subjects in English: a minimalist account. *Second language research*, vol. 18, No. 1, 28-71
- White, L. (2003). Second language acquisition and universal grammar. Cambridge University Press.
- White, L. (2022). Should Linguistics be applied and, if so, how? *Language Teaching*, 1-13.
- Whong, M., Gil, K.-H. & Marsden, H. (2013). *Universal grammar and the second language classroom*. Dordrecht: Springer. https://doi.org/10.1007/978-94-007-6362-3
- Williams, E. (1980). Predication. Linguistic Inquiry 11, 203-38