

THE PRODUCTION OF TELICITY IN BALANCED AND DOMINANT BILINGUALS

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ABSTRACT

The present study investigates the production of telicity by means of picture description task in balanced and dominant bilinguals. More specifically, this study aims to detect (a) whether bilingual speakers prefer to use prototypical choices that depict a telic event (i.e. perfective aspect; *Aspect Hypothesis*) and (b) whether the type of bilingualism (dominant vs. balanced bilingualism) affect bilinguals' performance. Previous studies have shown that bilingual children prefer prototypical choices over non-prototypical ones (Rieckborn, 2007; Schlyter, 2011) and that dominance negatively affect the acquisition of aspect, especially in early stages of acquisition (Rieckborn, 2006). Other studies claim that bilinguals, regardless of their type, produce more verbs in perfective aspect over imperfective aspect (Wilberg, 1996). Other studies in older bilingual children have manifested that older bilinguals (aged 8 to 12) are not affected by prototypical choices (Dosi, Papadopoulou & Tsimpli, 2016a; Andreou & Tsimpli, 2017). In the present study participated one hundred forty-five bilingual children and sixty-five monolingual children. In order to test the production of telicity and the (non-) prototypical choices, a picture description task is used, where ongoing and completed events of telic verbs were depicted. The results portrayed that balanced bilinguals scored higher than dominant bilinguals in the task; while, as expected, monolinguals outperformed all bilingual groups. All groups preferred to use more often perfective over imperfective aspect. Similarly, all the groups tended to omit the complements; conceivably due to methodological issues. We may conclude that (a) balanced bilinguals may have an overall advantage in the acquisition of telicity and (b) prototypical choices seem not to play a role in older ages; however methodology seems to affect aspectual choices.

Keywords: Telicity, production, grammatical and lexical aspect, balanced and dominant bilinguals.

INTRODUCTION

Research in Second Language Acquisition (SLA) revealed a long discussion on the acquisition of aspect and how the inherent semantics of verbs and their predicates (i.e. lexical aspect) interact with the viewpoint of the speaker (completed vs. ongoing events, i.e. grammatical aspect). Numerous studies in first language (L1) have shown that telicity is related to chronological age; thus children's choices are driven by prototypical choices in the early stages of language acquisition (see *Aspect Hypothesis*; cf. Andersen & Shirai, 1994, 1996). By contrast, in SLA language proficiency affects the acquisition of aspect (Shirai & Andersen, 1995; Olsen & Weinberg, 1999, Montrul & Slabakova, 2003). The research on telicity in bilingualism is rather scarce; especially in Greek (Dosi, 2016; Dosi, Papadopoulou & Tsimpli, 2016a; Andreou &

Tsipmli, 2017). Pragmatics (i.e. context and discourse) also affects aspectual choices (Grodzinsky & Reinhart, 1993; Slabakova & Montrul, 2007).

In terms of the balance and dominance, very few are the studies that investigate balance and dominance in relation to the acquisition of grammatical aspect (Rieckborn 2005, 2006; Dosi, 2016). The findings show that in younger bilingual children the dominance in the other language delays the successful acquisition of aspect and the children lean on prototypical choices (Rieckborn, 2006). By contrast, studies in older bilingual children manifest that telicity and prototypical choices do not affect speakers' choices (Dosi et al., 2016a; Andreou & Tsimpli, 2017). In the latter studies, methodology rather than telicity have an impact on their performance.

LITERATURE REVIEW

Grammatical aspect denotes the internal temporal structure of events of the verb and its predicates (Comrie, 1976; Smith, 1991). In many languages, aspect carries two types of information; grammatical and lexical cues. Grammatical aspect refers to the morpho-syntactic properties that the speaker applies to the verb predicate in order to depict the temporal perspective of the situation (i.e., ongoing/completed; imperfective and perfective aspect, respectively). Perfective aspect views the event as a whole and thus completed, while imperfective aspect permits both intermediate and end-point representations. If the event is completed, the focus of the speaker on the event is not restricted to its temporal endpoint.

Turning to lexical aspect, verbs are classified into four categories (states, activities, accomplishments and achievements) on the basis of three inherent aspectual properties: durativity, dynamicity and telicity (Vendler, 1957). *Durativity* refers to durative events, i.e. states and activities from instantaneous ones, i.e. achievements (e.g. *lose*). *Dynamicity* refers to any change of action/state, i.e. activities (*run*), accomplishments (*run a mile*) and achievements. *Telicity* denotes a natural endpoint, such as accomplishments and achievements; while atelic events indicate that there is no endpoint, i.e. states (*love*) and activities. Accomplishments have the same properties as activities regarding durativity and dynamicity, but they differ in telicity, since accomplishments are telic. Achievements are also telic and dynamic but they are not durative.

In terms of the acquisition of AH prioritize the inherent semantics of the verb, i.e. lexical aspect, over tense and aspect markers (Andersen & Shirai, 1994, 1996). The AH claims that "first and second language learners will initially be influenced by the inherent semantic aspect of verbs (lexical aspect) or predicates in the acquisition of tense and aspect markers associated with or affixed to these verbs" (Andersen & Shirai 1994: 133). Furthermore, the AH predicts that the perfective will initially appear with achievement predicates, then with accomplishments and finally with states and activities. On the other hand, the imperfective is expected to be acquired after the perfective forms and will initially appear with states, then with activities and finally with accomplishments and achievements (Shirai & Andersen 1995; Liskin-Gasparro 2000; Salaberry 1999, 2002). Moreover, it is expected that telic verbs, namely accomplishments and achievements, will be mostly used with perfective aspect, whereas atelic verbs, activities, and states, will be more compatible with imperfective aspect. Many studies in L1 speakers confirm the aforementioned performance (Bronckart & Sinclair, 1973; Antinucci & Miller, 1976); however others do not confirm it (Bar-Shalom & Snyder 2002; Weist, 2002; Olbishevskaya, 2011). In similar fashion,

studies in SLA either confirm or not AH in L2 learners. Studies in L2 acquisition have shown that the AH is detected in L2 speakers; thus they match the inherent semantics of the verbal phrase with grammatical aspect (Robinson, 1995; Bardovi-Harlig, 1995; Bardovi-Harlig & Bergström 1996). Nonetheless, there studies that do not confirm AH (Rohde, 1996) and manifest the role of proficiency as the most important factor (Wilberg, 1996; Slabakova & Montrul, 2000; Salaberry, 2002). In bilingualism, telicity does not seem to affect aspectual choices (Dosi et al., 2016a; Andreou & Tsimpli, 2017, Dosi et al., 2018). Previous studies in younger bilingual children have shown that the dominance in the other language delays the successful acquisition of aspect and the children lean on prototypical choices (Rieckborn, 2006). By contrast, older bilingual children's aspectual choices are more affected by task methodology.

METHODOLOGY

Participants

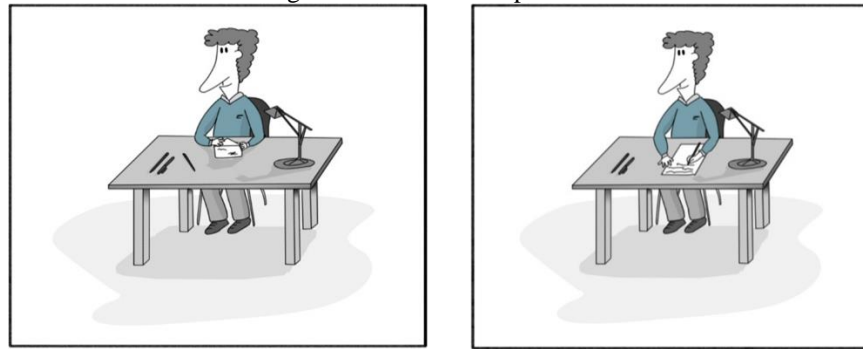
In the study participated one hundred forty-five bilingual children and sixty-five Greek monolingual children. The participants were either Greek-German or Greek-Albanian bilingual children, 8-12 years old and they were divided into three groups: (a) balanced bilinguals (N=47), (b) Greek-dominant bilinguals (N=51) or (c) other-dominant bilinguals (N=47) based on their performance in two expressive vocabulary tasks (one per language). Their scores were transformed in *z-scores* and those who were between -0.5 and +0.5 formed the “balanced” bilingual group; whereas those who were above +0.5 formed the “Greek-dominant” bilingual group and those whose scores were below -0.5 formed the “other-dominant” bilingual group.

A child questionnaire is used (Mattheoudakis, Chatzidaki & Maligkoudi, 2014), which includes questions about early and current language preferences and early and current literacy practices. The outcomes showed that balanced bilinguals use either Greek or both languages at home. Similar are the findings about their literacy practices and they attend either a Greek or a bilingual school. The Greek-dominant bilinguals use more the Greek language compared to the other one. Their schooling is mainly in Greek. Finally, the other-dominant bilinguals prefer, as expected, to use the other language (either German or Albanian), while their medium of instruction is mainly bilingual.

Material

The task was a picture description task (see Dosi, 2016). The aim of the task was the production of perfective or imperfective aspect in different verb types (e.g. achievement and accomplishments; 6 verbs per verb type) along with the prepositional phrases “for/in X time”. There were 2 pictures per verb, one depicting the event as ongoing and one depicted the event as completed; 24 target-pictures followed by 24 pictures, which were distractors, in order to avoid the development of any strategies. The researcher showed the pictures, one by one, to the participant and then (s)he asked “what did X do in an hour?”, if the event was completed (see Figure 1, left side); or “what was X doing for an hour?” (see Figure 1, right side), if the event was ongoing.

Figure 1. Picture description task

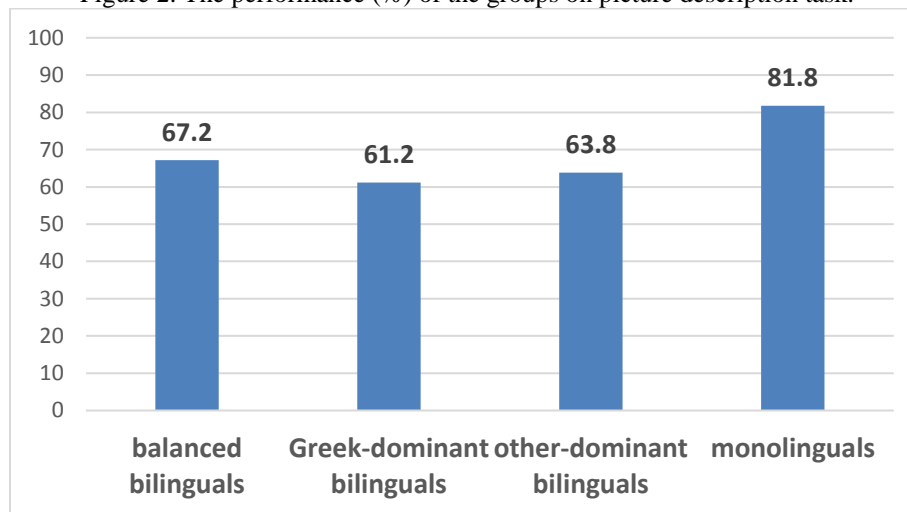


In terms of the coding and marking, if the participant used perfective or imperfective aspect if the event depicted was completed or ongoing, respectively, they received 1 point. In any other case, they received 0 point.

RESULTS

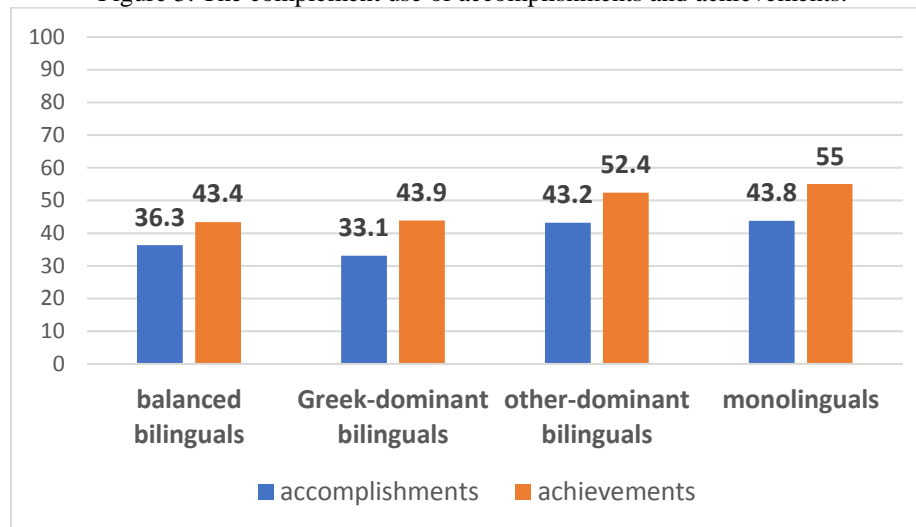
In terms of the accurate use of perfective/imperfective aspect based on the given picture and the question, differences were observed among the groups ($F(3,204)= 35.070$, $p < 0.001$). Post hoc criteria Bonferroni have shown that monolinguals (81.8%) outperformed all bilingual groups ($p < 0.001$, for all comparisons). Interestingly, balanced bilinguals scored higher (67.2%) than Greek-dominant bilinguals (61.2%; $p = .011$). No other differences were detected between the bilingual groups (see Figure 2).

Figure 2. The performance (%) of the groups on picture description task.



In terms of the complement use, all groups tended to omit it. An interesting finding was that the monolingual group and the group which was dominant in the other language, used the complement more often (49.4% and 47.8%, respectively) than the balanced group and the Greek-dominant one (39.9% and 38.6%, respectively). Another interesting finding was that all groups tended to use the complement more in achievements and less in accomplishments (see Figure 3).

Figure 3. The complement use of accomplishments and achievements.



Finally, it was found that all the groups preferred to use perfective aspect over imperfective one, regardless of the picture presented (balanced group: 65,3%, $\chi^2(1)= 106.131$, $p < 0.001$; Greek-dominant group: 62.5%, $\chi^2(1)= 76.500$, $p < 0.001$; other-dominant group: 63.9%, $\chi^2(1)= 84.815$, $p < 0.001$; and for the monolingual group 57.2%, $\chi^2(1)= 31.431$, $p < 0.001$).

DISCUSSION

In the present study the production of telicity was investigated in balanced and dominant bilingual speakers. The main findings are the following: (a) balanced bilinguals scored higher than Greek-dominant bilinguals, while, as expected monolinguals outperformed all the bilingual groups; (b) all groups in most of the cases omitted the complement, especially in accomplishments, compared to achievements; and (c) most of the participants used more perfective than imperfective aspect.

To discuss them in more detail, the results exhibit a rather low performance of all bilingual groups (almost at 60%) compared to the higher performance of the monolingual group. An interesting finding was that balanced bilinguals outperformed Greek-dominant bilinguals, confirming previous studies (Dosi, 2016) and indicating that balanced bilinguals may have advantage in phenomena that involve more interfaces (Dosi, Papadopoulou & Tsimpli, 2016b).

With respect to the use of the complement, all the groups tended to omit it; however the omission was more evident in balanced and Greek-dominant bilinguals. This performance can be explained if we consider that the researcher could also see the pictures, so it can be an economy principle of language (see previous studies with similar methodology Dosi, 2016; Dosi et al., 2016a, 2018). In addition the finding that most of the participants omitted the use of the complement with accomplishments and less with achievements confirms the previous argument; since in the accomplishments the complement can be implied (e.g. *read* (a book)), while in achievements the omission of the complement leads to an ungrammatical sentence (*lose* the game).

The use of perfective aspect over the imperfective one can also be justified because of the methodology followed. More specifically, the pictures presented were static and the participants

conceivably preferred to judge them as completed even when the event presented was ongoing (similar to previous studies Dosi, 2016; Dosi et al., 2016a, 2018). Thus, telicity seems to affect participants' choices in terms of the use of perfective; nonetheless it is more likely to be affected by methodological factors (i.e. static pictures, as mentioned before) and not by Aspect Hypothesis (Dosi et al, 2016a; Andreou & Tsimpli, 2017).

From the aforementioned findings we may deduce that in the case of telicity balanced bilinguals have an advantage over dominant bilinguals, possibly due to the complexity of the phenomenon and the involvement of different interfaces (Dosi, 2016, for a review). Telicity seems to affect aspectual choices; however we should be careful because in this study only telic verbs were examined and the findings may be misleading (Tracy-Ventura & Myles 2015, Dosi 2016).

CONCLUSIONS

The aim of the study was the investigation of the production of telicity in balanced and dominant bilinguals. The outcomes suggested that balanced bilinguals exhibit a higher performance compared to dominant bilinguals, indicating a "bilingual advantage". All groups inclined to omit the complement especially in accomplishments, since in achievements it is ungrammatical. Similarly, most of the groups preferred the use of perfective aspect compared to the imperfective aspect; however this finding must be considered carefully because possibly it is subjected to methodological issues. In a nutshell, although the present findings seem to support the Aspect Hypothesis, we believe that it is more an issue of methodology that should be taken into account by future studies.

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