Policy Papers

November 2020

Grammatical errors: what can we do about them?

by Theodora Alexopoulou

- Every second language (L2) speaker will make grammatical errors, irrespective of age, education, motivation or learning context. Errors often persist even after focused teaching of the relevant forms and rules and abundant exposure to input through immersion.
- Errors may persist even in the language of young learners immersed in mainstream education. It is important to recognise that grammatical errors do not, in any way, reflect the cognitive abilities or intelligence of these young learners.
- Grammatical errors arise because learners have difficulty processing L2 forms which do not have easily identifiable meaning. Learning activities helping learners to process the relevant forms correctly can improve their accuracy. Such grammar processing activities need to take into account the degree of similarity between the target L2 forms and the first language(s) of the learners.
- Young immigrant children acquiring the language of their host country through immersion in mainstream education require support in their L2. Online grammar activities incorporated in a blended learning environment can provide a personalised approach, without disrupting children's attendance in the mainstream classroom.

Grammatical errors

Everyone can learn a language, young or old, educated or not. It can happen in many different ways: taking a foreign language course, migrating to a new country for work or study, growing up in a multilingual community. In any of these contexts, most learners will make fast progress and use their new language effectively to communicate. Yet, all learners will find some aspects of grammar challenging and will make grammatical errors. Their errors often persist even after many years of use, when they are otherwise quite advanced L2

speakers. Why is this and what can we do about it? The why question is particularly interesting because grammatical accuracy, and the more general difficulty of L2 learners to reach native competency is not, in any way, a reflection of their general cognitive abilities and intelligence. We all know very accomplished and intelligent individuals who regularly get stuck with seemingly basic errors, e.g. getting the preposition wrong in '*I arrive at Paris*'. Rather than general intelligence, the difficulty with grammatical errors is due to the very distinct nature of language acquisition. To understand grammatical errors and help learners eliminate them, we need to understand the cause of errors and then adjust our teaching accordingly.

Consider, for example, the short extract below written by a Brazilian intermediate learner (Derkach and Alexopoulou 2019). The extract is from EFCAMDAT, a corpus of writings from an international school of English as a foreign language, EF Education First. It discusses policies around smoking. The language shows good ability to talk about an abstract topic, a good range of vocabulary and overall success in communicating ideas about smoking and cigarette advertising. Nevertheless, the author also makes errors with their choice of articles.

Certainly, here in Brazil we have some of the strictest laws of the world regarding the smoking. Obviously, it is recent. About ten years ago, or a little bit more, the advertising promoted the smoking habits using lifestyle, freedom, adventure and, several times, health and sports. Today it is unthinkable. But at that moment, that was a most effective strategy to sell smoking cigarettes in my country. However, today is very different. The advertising is very restricted. The communication must be made to adult people. The smoking industry cant associate your products and brand to sports, health or lifestyle. The packing of cigarettes must show the effects of smoking habits, such as a cancer and other diseases. Furthermore, smoke is prohibited at several public places, restaurants and shopping. I agree with restrictions. I think today is better than before that laws.

Such errors, while frustrating for learners and teachers, provide researchers with a window into the acquisition process in the learner minds (Corder 1967). Grammatical errors are not random. Rather, they reflect the hypotheses learners make about how items like 'a' or 'the' are used. In the extract above, the learner overuses articles with abstract concepts like 'smoking, advertising, communication'. In linguistic jargon we say that the learner does not know that many generic nouns in English should appear without an article.

What kind of feedback can help the learner? We may try to explain the incompatibility of the article with generic nouns. But what about examples like '*The mobile phone has changed communication*', '*These days there isn't anything you cannot do with a mobile phone*'. The underpinning rule seems to be that plural nouns should appear without the article when generic, but singular nouns require an article. Is teaching such grammar rules effective?

The question is not restricted to articles but to a wide range of forms: e.g. verb endings as in *work-s, work-ing, work-ed* or choosing the right version of 'red' in Spanish, as in *la puerta roj-a* (the red door) or *el reloj roj-o* (the red watch). These forms and choices are challenging for learners across languages, ages, and learning contexts. It might take years for learners to acquire these elements and eliminate their errors, typically not before advanced levels of proficiency (Murakami and Alexopoulou 2016). Many will achieve high accuracy, but variable success is generally what characterises L2 learning with some learners stabilising at very low levels of accuracy, roughly providing verb endings only for a third of their verbs (Lardiere 1998). This is true both for naturalistic or immersed learners who acquire their L2 while living, studying or working in a country where their L2 is spoken, as well as learners who have received extensive formal instruction at foreign language schools. Rather strikingly, even young children exposed to English as early as at 4 or 5 years of age continue to make grammatical errors after years of immersion in primary education in English in their host country (Paradis et al 2016).

It is important to highlight that grammatical errors do not, in any way, reflect the general cognitive abilities and intelligence of the L2 speakers. Rather, they reflect the very distinct nature of language acquisition, in comparison to other areas for learning. For example, language is the only area of learning where preschool children would have an advantage over late teens (Hartshorne, Tenenbaum and Pinker 2018). It is, therefore, crucial to understand what is specific about language acquisition that gives rise to persistent grammatical errors in otherwise very able learners. But let us first consider whether grammar teaching can help improve grammatical errors.

Can teaching grammar eliminate grammatical errors?

Grammar teaching typically involves explaining rules like 'plural nouns in English are marked by the ending -s' so that we say one cat but two cat-s; or 'in English questions the auxiliary verb precedes the subject' e.g. 'is the baby sleeping'? Norris and Ortega 2008 conducted a meta-analysis of 49 studies and found that grammar teaching improves the grammatical accuracy of learners. The interpretation of this study is not straightforward though. Instruction does increase the learners' understanding of rules and their ability to spot errors in specific tasks. But it is less clear that it can improve their language long term. The reason is that knowledge of rules can exist independently of one's ability to speak the language. For example, I might, as an L2 speaker know that an -s is necessary at the end of 'like' in 'she likes chocolate' but still omit it when I speak. Just like I might know all the instructions or rules on how to ride a bike, but still cannot balance. Krashen 1981 recorded the spontaneous speech of a learner and then presented her with a transcript of her speech. The L2 speaker was able to correct her errors in the transcript. This example demonstrates that two distinct, though often conflated processes are involved in L2: language acquisition and language learning. Spontaneous L2 language use, which contains grammatical errors, reflects the unconscious knowledge of L2 learners and is the result of *acquisition*. The ability to self-correct errors reflects conscious L2 knowledge, which is the result of *learning*.

Krashen's distinction between (implicit) acquisition and (conscious) learning has underpinned debates regarding the place of grammar instruction in the L2 classroom. There is no doubt that grammar teaching can improve the conscious knowledge of learners. It can be very helpful at beginner levels to de-mystify exotic or mysterious elements of the L2 as well as satisfy the natural curiosity language learners might have about their new language. It is a matter of debate whether grammar teaching can impact on (implicit) acquisition (van Patten 2016), yield long term effects and rid learners of their grammatical errors, especially at more advanced stages when learners rely much less on their conscious knowledge of rules and more on their implicit knowledge of their L2.

Which grammatical features learners find difficult and why?

Imagine travelling to a country where no-one speaks English and you don't speak the local language. You will most likely reach for a dictionary looking for translations of words. Words link concepts like *table, tiger, big, small, cold, hot, fear, love, freedom* to pieces of language. Our inventory of concepts organises our word knowledge. When it comes to L2, it is our springboard for learning L2 words as it allows us to map new words to our existing conceptual inventory. And this can be fast. It also makes our L2 learning very meaning driven, giving prominence to the lexical content of words.

The next step is to put words together into phrases and sentences. Here again, we bring a lot from our first language(s). Through our first language(s) we have a system which groups words into phrases to derive meaning; it is our *syntax parser*. Consider the sentence '*i saw the girl with the binoculars*'; who has the binoculars? It could be 'I' or it could be the 'girl'. We have just one sentence, one string of words, but two meanings. How do we get two possible meanings out of one string of words? It is our parser that can group '*with the binoculars*' with '*saw*' to indicate what instrument I used or with '*the girl*' to indicate an object carried by the girl. We can also combine sentences into more complex and longer ones. For example, '*i love the jumper you gave me for my birthday*' is actually two sentences in one: '*you gave me a jumper for my birthday*' and '*i love the jumper*'.

Languages may vary in the way they order words and phrases, for e.g. Japanese puts the verb at the end while Welsh at the beginning. But the core principles for combining words to build phrases are similar across languages so that we can use our syntax parser to process L2 sentences. Not only we can learn new words quickly, but we can also understand and produce complex sentences at a remarkably fast rate. We find evidence for this in big corpora like <u>EFCAMDAT</u> which provide us with writings of thousands of learners from around the world across proficiency levels. Learners use complex sentences already from late beginner stages, A2 of the Common European Framework of Reference for Languages, CEFR (<u>Alexopoulou et al 2015</u>). Rather strikingly, they use complex language before they are even taught the relevant structures, as most current curricula introduce complex sentences at late intermediate level (or B2). This fast progress with complex sentences is possible because learners can employ their syntax parser to process the language data they hear.

The experience of rapid learning is familiar to learners of intensive immersion programmes or immigrants who within a few months of arrival in their host country are able to fulfil many communicative needs in their L2.

The conceptual inventory and syntax parser we bring from our first language(s) are our springboard to L2, enabling fast progress. At the same time, what is language specific and different from our first language(s) will be harder to acquire. For instance, words with specific cultural meanings or conventions e.g. *butler, humour, afternoon tea, clown* will be

harder. Some of these words will require cultural experiences that may not be readily accessible to L2 learners. Not only what is language specific but also what does not contribute to meaning will be difficult to acquire. Because the starting point of L2 learners is word meanings, they look for such meanings when processing language and have difficulty with grammatical elements that do not have easily identifiable meaning. And this is where grammatical errors arise.

Let us consider English verb forms. For example, think of a learner hearing the following:

- 1. a. I am loving it!
 - b. I love it!
 - c. We loved it!
 - d. I am leaving tomorrow.

One can easily discern the meaning of love, love is, after all, a universal concept! It is harder to decide on the meaning of the verb endings. It is probably easy for the learner to grasp that *love/am loving* is about now and *loved* is about the past. But what about *I am loving it* vs. *I love it*? Is the contrast about the intensity of love, its duration, how permanent it is? In addition, the 'meaning' of these forms changes depending on context. Example (d) is about the future, not the present. Such verb forms are challenging for learners for many reasons; they are language specific; they are small and difficult to hear and we know that, at the early stages of acquisition learners prioritise the word meaning over these forms (van Patten 2015). So even if these forms are abundant in the language learners hear, they do not process them; it is as if these forms don't exist for learners.

While the precise form-meaning mappings are language specific, some languages organise the information in ways that are more similar to some languages than others. The degree of similarity between first language(s) and L2 influences how well learners can process and acquire L2 grammar forms. For instance, Chinese does not change the form of verbs to indicate when things happen. Most European languages do use verb forms like English, but their form-meaning mappings align in a different way to English. These differences make these forms hard to acquire and lead to errors. For example, Chinese learners might omit verb endings altogether, e.g. they would say '*Yesterday she walk to the park'*. Spanish or Greek learners might misanalyse some of these forms and say '*when I was a kid I was eating an ice cream every day of the week'* instead of '*I ate an ice cream everyday of the week*.'

On top of the L1-L2 differences, forms that do not have an obvious meaning contribution are particularly challenging for learners. In many languages noun endings depend on the gender of the noun, as we saw earlier in Spanish. The gender of a noun is generally unrelated to its meaning. For example, the word 'sun' is masculine in Spanish but feminine in Hebrew. Grammar rules with arbitrary features like grammatical gender are among the hardest for L2 learners (Tsimpli et al 2007, White 2003).

In a nutshell, learners have difficulty with forms that lack obvious meaning, a difficulty that is moderated by the similarity between the L2 and the learners' first language(s). This is true even for forms that are abundant in the input and extensively taught in foreign language classrooms.

Enabling the acquisition of grammatical forms

Presenting learners with abundant input will not, in itself, eliminate the errors. We need interventions that target the way learners process the problematic forms. Van Patten's Input Processing Instruction is a prime example, as a method that leads to longer lasting improvements in learners' accuracy. Learners are presented with structured input activities to help them process the target grammatical forms. For example, learners are given a short sentence like 'she walked slowly to the park' and asked to indicate when the event took place. Cues that could help the learner answer the question e.g. a phrase like 'last night' are excluded so that the learner has to process the -ed form to answer the comprehension question.

Conclusions and recommendations

- All L2 learners, irrespective of age, cognitive abilities and education, experience difficulty with certain grammatical aspects of L2.
- The difficulties learners experience with their L2, do not reflect their cognitive abilities and intelligence, but the language acquisition process for which they require support.
- Interventions with grammar activities targeting the ways learners process their input are necessary to help them eliminate their errors. Such activities need to take into account the similarity between the target L2 and first language(s). Materials can target language types rather than individual languages: for instance, all learners can be presented with a core set of activities for the English article, but additional activities can be offered to learners from languages which do not have articles.
- There are two practical challenges. First, attending to the individual needs of learners with varying linguistic backgrounds should not impact on the cohesion and inclusiveness of classes. Second, grammar processing activities should not take vital classroom time away from activities where learners can practice real life language use and be exposed to rich and varied language input. Fortunately, grammar processing activities can be easily incorporated as an online component in a blended learning environment (Meurers et al 2019), so that the cohesion and inclusiveness of classrooms can be protected and classroom time continues to focus on tasks that can engage learners in meaningful language use providing rich and varied input.
- Developing grammar processing activities necessitates teacher training with systematic integration of linguistic insights in teacher qualification programs (e.g. TESOL) as well as a closer collaboration between textbook authors and linguists.

Further reading

David Adger, 2019, *Language Unlimited: the science behind our most creative power*, Oxford: Oxford University Press.

Roger Hawkins, 2020, *<u>How second languages are learned</u>*, Cambridge: Cambridge University Press.

Akira Murakami and Theodora Alexopoulou, 2016, <u>L1 influence on the acquisition order of</u> <u>English Grammatical Morphemes: A learner corpus study</u>, *Studies in Second Language Acquisition*, *38*(3), 365-401.

Bill Van Patten, Megan Smith and Alessandro Benati, 2019, <u>Key Questions in Second</u> <u>Language Acquisition: An Introduction</u>, Cambridge: Cambridge University Press.

Ianthi Maria Tsimpli and Maria Dimitrakopoulou, 2007, <u>The Interpretability Hypothesis:</u> <u>evidence from wh-interrogatives in second language acquisition</u>, *Second Language Research*, 23(2):215-242.

About the author

Dora Alexopoulou is a Principal Research Associate at DTAL, PI of the EF Research Lab for Applied Language and Learning which investigates second language learning of English and aims to bring innovation in language teaching through a systematic cross-fertilisation between linguistic research and teaching techniques.

Cite this article

Alexopoulou, Theodora. 2020. 'Grammatical Errors: What Can We Do About Them?', *Languages, Society and Policy*.