# Language Universals and Language Diversity: What we Know and their Implications on L2 Language Learning

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## 1 Introduction

Given the plethora of frameworks of second language acquisition (SLA) and abundance of theories on general language learning, second language (L2) teachers have the difficult task of deciding how best to teach their L2 learners so that their teaching is effective and students' learning is efficient. Many theories have been developed over the years in attempts to describe SLA, such as the behaviourist theory of Skinner (1957). He proposed that SLA was simply the development of new habits, where language learning was a repetitive process of practicing and reinforcing correct language production until it became a habit. Of particular interest to this essay are Chomskyan linguists, who have applied Noam Chomsky's (1976) theory of Universal Grammar (UG) to explain SLA as a resetting of parameters against universal principles. In addition to understanding how students acquire an L2, teachers also need to be aware of the differences between students' first language (L1) and L2, as students' errors or habits in the L2 can sometimes be explained by a process called "language transfer", where features of previous learned languages can appear in the language they are learning (Lightbown and Spada, 2013, p. 43; Selinker, 1972, p. 37). This essay will discuss the implications of what we know about language universals and language diversity for Chinese adult learners of English as an L2 and the teachers of these students. From a UG-based approach to SLA, the first section will briefly define UG, then examine whether adult L2 learners have access to UG and elucidate how learners and teachers are affected if access to UG is limited. Then, this essay will also discuss the implications of language diversity on these students and teachers, namely how knowledge of phonological and discourse-pattern differences between English and Chinese can impact the learning of L2 English for Chinese adult learners, and how this knowledge can benefit teachers of these students.

## 2 Language Universals And Their Implications

### 2.1 Universal Grammar

The term 'language universals' in this essay refers to Universal Grammar, with emphasis on universal principles; universal principles being very "abstract statements relating to general

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properties of language" (Ellis, 1994, p. 416). UG, as defined by Chomsky himself, is "the system of principles, conditions and rules that are elements or properties of all human languages" (Chomsky, 1976, p. 29). In other words, Universal Grammar is a template that contains all the possible principles in all human languages (Lightbown & Spada, 2013, p. 20), where human languages can choose which of these possible principles to exhibit. A natural human language might not make use of all the possible principles in UG, but it cannot exhibit something that is beyond this set of universal principles. Jackendoff (2002, p. 263) compares UG to a 'toolkit' where languages can choose which tools they use, and how extensively, but cannot choose a tool that is not within the toolkit. Some principles have parameters, which are a limited set of options or ways in which a principle can vary from language to language (White, 1989, p. 29).

Chomsky's UG, a genetically endowed mechanism (Bley-Vroman et al., 1988, p. 3), mainly details how a child can master any language in their environment, despite possibly not being exposed to sentences with complex and abstract properties, and without being explicitly taught (White, 1989, p. 5). In other words, UG is primarily concerned with FLA in children. But can the theory be used to account for SLA? This is exactly what many Chomskyan researchers investigating L2 acquisition aim to answer, wondering if adult L2 learners still have access to the innate system of UG. Gass and Selinker (2002, pp. 176–177) describe 5 possible positions regarding the availability of UG, centred around the two main variables of transfer of L1 and access to UG: full transfer/no access, no transfer/full access, full transfer/full access, partial transfer/full access, partial transfer/partial access. Following a general consensus from research that take a UG-based approach to SLA, this essay will take the position that adults have at least partial access to UG (Ellis, 1994; Smith and Tsimpli, 1995; Tsimpli and Roussou, 1991), with either full (Schwartz & Sprouse, 1996) or partial transfer of the L1 (Hawkins & Chan, 1997).

## 2.2 The Partial-access Position

While the "no access" to UG position relies on assuming that L1 and L2 acquisition are completely different processes and the "full access" to UG position assumes the exact opposite, the "partial access" position sees both similarities and differences between L1 and L2 acquisition. This position allows for UG to be available to the adult L2 learner, but certain factors may impede on its full operation leading to mastery of the L2 (White, 1989, p. 50). But what are the implications on adult SLA and L2 teaching when we understand UG and know that adults have partial access to it?

### 2.2.1 Implications for students

First, we need to understand how partial access to UG affects adults' SLA. In White (1989, pp. 51–54), having partial access to UG as an adult L2 learner can mean that learners are able to distinguish grammatical structures from ungrammatical structures, similar to L1 acquisition. Student errors made during any stage of acquisition would also not violate any universal principles in UG. For example, Chinese speakers may make the error of dropping pronouns in English, as influenced by Chinese: Is raining. This error is not a violation of UG, however, as it is a form that is permissible form in that it is a grammatical form in other languages. For White (1989, p. 53) learners are also able to "tap" into principles not activated in their L1, as

well as reset any parameters established in the L1. This ability to access all principles and parameters despite a learner's L1 not exhibiting all of the options means it is possible for adult learners to reach native-like levels. For Hawkins and Chan (1997), Smith and Tsimpli (1995) and Tsimpli and Roussou (1991), however, parameters cannot be reset by adult learners even if they have access to all UG principles that include 'grammatical options…not…adopted by the L1 grammar nor by the L2 target grammar' (Tsimpli & Roussou, 1991, p. 151). Therefore, even if Chinese speakers can access universal principles like the Phrase Structure Principle which describes the position of the phrase head in relation to the entire phrase (Ellis, 1994, p. 416), students are unable to reset their parameter settings once they have been set in childhood. This inability may explain why Chinese speakers who have learned English post-childhood sometimes struggle with the head-initial aspect of English. Chinese is mostly a head-final language, with exceptions to objects of verbs and prepositions, and some types of complements (Huang & Li, 1995, p. 55).

This does not mean, however, that Chinese students learning English as an L2 never correctly grasp the head-initial structures of English. In the early stages of L2 learning, L1 transfer errors tend to be present, but eventually students make the correct 'parametric choice' at the more advanced stages of L2 learning as a result of 'general learning mechanisms correctly analysing the input data' (Tsimpli & Roussou, 1991, p. 152). In other words, eventual correct production of language forms results from mechanisms such as pattern-recognition, problem-solving or simply memorisation, rather than from the resetting of parameters. We can see, then, that the implications of partial access to UG in adults can both assist and hinder SLA.

### 2.2.2 Implications for teachers

Now that we are aware of the implications for SLA, we can turn to the implications for teachers given limitations on parameter resetting as described in Tsimpli and Roussou (1991). If adult L2 learners are unable to reset parameters, then perhaps teachers need to focus on explicitly teaching the rules and pointing out the differences in these areas between the L1 and L2. For example, as Chinese is mostly a head-final language that allows ellipsis of subjects (pro-drop), teachers may find it useful to highlight to students that English is actually a head-initial language where subjects are obligatory in all sentences. SLA theory has found that students can only learn the grammatical structures that they "notice" and are aware of (Gass, 1988; Schmidt, 2001), but like a computer, a brain has limited capacity to process information, and can only focus on and master a few aspects of the L2 at a time. McLaughlin et al.'s "informational processing" theory (1983) posits that only through repeated practice can the initial laborious "controlled" processing of information eventually become an "automatized" process requiring minimal effort, 'free[ing] up cognitive processing resources' (Lightbown & Spada, 2013, p. 109) to process novel information that, in turn, will gradually become automatic. Thus, if students are aware of the differences between Chinese and English, students may be more likely to acquire these aspects of English accurately given adequate practice and exposure. Teachers should provide opportunities where students can produce, either orally or in writing, correct sentences focusing on these differing structures that exist between Chinese and English, so that errors resulting from L1 (Chinese) transfer can be eradicated. Forcing students to produce correct sentence structures allows learners to understand the gaps in their linguistic knowl-

edge, improving their grammatical accuracy as they challenge their linguistic resources (Swain, 1985).

To conclude this section, it must be said that there are various implications of language universals on second language learning and teaching. With a specific focus on adult Chinese students learning English as their L2, language universals have been shown to play a role in SLA, in that adult learners can still access the universals principles described in Universal Grammar, but may or may not be able to reset parameters. The implications on teaching would thus be for teachers to explicitly make students aware of these features in the L2 that supposedly cannot be reset, so that students can consciously make efforts to produce correct sentence structures in English despite inability to invoke a part of the innate mechanism.

Indeed, a UG-based theory of L2 acquisition only describes a relatively 'restricted phenomenon', namely 'that part of grammatical competence…determined by an innately specified and abstract knowledge of grammatical principles' (Ellis, 1994, p. 458). Because this branch of SLA theory does not account for other aspects of SLA, such as lexicon development, understanding speech acts and knowing how to appropriately use the language in different contexts, discourse-pattern conventions and phonetics, this essay will now turn to examining the implications of acknowledging language diversity on L2 learners and L2 teachers, to provide a more holistic (although still very limited) view on second language learning and teaching.

## 3 Language Diversity And Its Implications

Knowing that the world's languages are diverse and varied, and knowing where exactly two languages differ, can have crucial implications for the learner and for their teachers. An English teacher with a class of adult Chinese speakers may find it useful to understand the conventions and structures of Chinese, so that they are able to provide better assistance or explanations to their students. Errors in students' L2 may result from a superimposition of L1 rules, pronunciations, lexicons, etc. into the L2 as described in Selinker (1972), and one of the ways of correcting these unconscious errors is by making students aware and conscious of them through elucidating the differences between Chinese and English. Just as Ferdinand de Saussure claimed that concepts are defined by what 'the others are not' (de Saussure & Baskin, 2011, p. 117), English conventions, nuances, pronunciation and so on can perhaps be defined in a similar way: whatever Chinese (and other languages) is not. With a limited amount of space, only discourse-patterns and phonetics will be discussed in this section.

### 3.1 Discourse-patterns

Here, discourse-patterns refer to how individuals from a certain culture or group may tend to organise information and present arguments in a written text. Kaplan (1966) asserts that cultures have their own 'thought patterns' or 'rhetorical patterns', identifying five models for organising a written text and structuring an argument: English, Semitic, Oriental, Romance and Russian. He believed that every culture had differing logic and thought patterns, which were reflected in how writers would structure information. Kaplan defines Oriental as Chinese and Korean but not Japanese, and although this definition has been criticised for being too

simplistic (Severino, 1993, p. 46), there is some truth in saying that Chinese writers of English show a spiral-like pattern of argument structure where the subject is shown from a various angles, but never approached directly (Kaplan, 1966, p. 10).

Chinese culture likes to see matters from both sides, being 'accustomed to the harmony and unity of the world', and thus have a 'tortuous thinking mode' where speakers will describe all other relative information prior to reaching the main point; English in contrast, has a 'straightforward thinking mode', where the main point is at the beginning before moving on to present relevant information (Wang & Chen, 2013, p. 648). The Chinese generally shift from the broad to the specific and detailed, perhaps describing the objects before the result, while in English it is the result that appears before the reasons or objectives (Wang & Chen, 2013, p. 649). Perhaps it is due to these habits of presenting information that a native English speaker reading a piece by a Chinese speaker may find the text 'awkward and unnecessarily indirect' (Kaplan, 1966, p. 10), as if spiralling around the main point. In addition, because the Chinese rely on the context of the whole text to understand the logical and relation between sentences, two sentences without logical indicators connecting them can appear to be unrelated to an English speaker, as English relies on conjunctive phrases to show how sentences are connected to each other (Wang & Chen, 2013, pp. 649–650).

### 3.1.1 Implications for students and teachers

The implications of understanding diversity in discourse-patterns between languages is that adult Chinese learners of L2 English and their teachers can improve efficiency and effectiveness of students' language learning by focusing on and addressing problem areas. With studies such as Guo and Liu (1997) finding that logic reasoning of learners in the L2 are driven by their L1, Wang and Chen (2013, p. 650) believe that overcoming the 'impact of Chinese thinking in English learning process[es]' requires comparing the differences between Chinese and English thinking as this can help students 'improve cross-cultural awareness' and 'cultivate their English cultural sensitivity'. Knowing also that Chinese students may not have practice in this 'straightforward thinking mode' employed in English, teachers can emphasise the importance of including formal logical indicators in written texts and provide additional support in explaining how, when, and where conjunctions are used, while students are made aware of what is required when writing in English.

In terms of discourse-patterns, it is important for both students and teachers to understand the differences between English and Chinese conventions. Being aware of the Western culture and of the different way English organises information can improve students' mastery of the language, and teachers can better assist students in 'reducing Chinglish' (Wang & Chen, 2013, p. 651) in their writing.

## 3.2 Phonetics

Similar to how the universal principles in a language are drawn from the complete bank of principles from Universal Grammar, the sounds in a language are drawn from the International Phonetic Alphabet (IPA) which lists all the humanly possible sounds. Knowing how different languages like Chinese and English may differ in terms of which phonemes exist and which

do not, can help students and teachers identify the sounds that may be tricky to acquire, and thus attention can be focused on difficult sounds. Such attention is not to purport that only a Westernised English accent or pronunciation is acceptable; its aim is to ensure that adult Chinese learners of L2 English can be better understood and reduce misunderstandings.

### 3.2.1 Implications for students and teachers

Consonant pairs such as /n/ and /l/, and /l/ and /ɹ/ are often not distinguished in some Chinese languages (Pavlik, 2012, p. 7), often causing confusion for both the student and their interlocutors when these consonants are not articulated properly. In addition, research has found that, in fact, it is English vowels that are most difficult for Chinese-speaking L2 English learners (Jin & Liu, 2014). Chinese languages tend to have fewer vowel sounds than English, meaning English vowels are closer together (Swan & Smith, 1999). Especially as this essay examines adult learners, it is increasingly important to make efforts to consciously teach students how English vowels are different to Chinese. The older a student is, the more likely it is that L1 vowels are used in the L2, making understanding the L2 more difficult (Baker et al., 2008). Because Chinese languages lack distinction between tense and lax vowels while English distinguishes between short and long vowels, Avery and Ehrlich (2012) found that Chinese students often end up making short vowels too long but long vowels too short. Indeed, this could mean a word like hit is interpreted as heat due to mistakenly elongating the vowel, causing confusion in spoken English. To lessen confusion, Tubbs (2016, p. 16) advocates for 'a systematic treatment' of English vowels complemented with knowledge of how Chinese and English differ phonetically, which can 'be of great benefit in helping students to be better understood'. Certainly then, we can see that an understanding of phonetic diversity has benefits for both Chinese students and their teachers.

## 4 Conclusion

In short, the implications of understanding and applying our knowledge of language universals and language diversity to second language learning and teaching are that adult Chinese students should become more aware of what may be difficult when acquiring English as an L2, while teachers should be able to provide more targeted assistance in these problem areas. Specifically, we know that UG is an innate cognitive mechanism that both helps and hinders SLA, and understanding this means teachers can find ways to best overcome these cognitive restraints. Knowing that languages can be diverse in many aspects such as in discourse-patterns and phonetics mean both learners and teachers of L2 English can reduce misunderstanding and confusion through better grasp of both Chinese and English. Such knowledge of the differences between both languages, and the special features of English, may ultimately provide students with a better chance to master English.

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