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Features or parameters: which one makes second language acquisition easier, and more interesting to study?

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‘Though this be madness, yet there is method in’t.’ *Hamlet*, act 2 scene 2

While agreeing with Lardiere that the ‘parameter-resetting’ approach to understanding second language acquisition (SLA) needs rethinking, it is suggested that a more construction-based perspective runs the risk of losing deductive and explanatory power. An alternative is to investigate the constraints on feature assembly/re-assembly in second language (L2) grammars. A model of grammatical organization is adopted from Ramchand and Svenonius (2008) in which properties of the conceptual–intentional (C–I) module of mind are universal, and variation between languages is determined by the extent to which such properties are grammaticalized or determined by context. Predictions are then made about the degree of difficulty involved in determining the appropriate mapping from the C–I module to grammar or context when a learner’s first language (L1) is similar to or different from the L2.

Keywords: features in L2, articles, universal syntax/semantics, cline of L2 difficulty

I Introduction

Donna Lardiere’s keynote article offers a refreshing and provocative (critical) look at the linguistic theory underlying the generative approach to SLA. By proclaiming ‘parameters are dead!’ the author is steering us away from conveniently (and complacently) answering the access-to-UG question with a simple ‘yes’ or ‘no’. We all knew that the rosy view

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of parameters being responsible for a range of superficially unrelated constructions appearing in the interlanguage grammar at the same time was too good to be true anyway. Now Lardiere is challenging the SLA-as-parameter-resetting paradigm itself. If we assume an inventory of (interpretable and uninterpretable) features, which are made available by Universal Grammar (UG),¹ then variation among languages boils down to whether or not a particular feature has been selected in the first language (L1) and can be transferred to the second language (L2) or selected anew from this inventory. Lardiere cogently points out that simple feature selection is woefully insufficient to describe cross-linguistic variation and is completely inadequate in explaining inter-personal and even intra-personal variation among learners. Instead, to understand the difficulty of SLA, we should compare feature assembly and re-assembly in the L2. For each feature necessary in the L2 grammar, learners should identify which lexeme (bound or free, inflectional morphology or open-class) encodes that feature, and even whether it is encoded by a lexeme at all. Following Cowper (2005), Lardiere questions whether a feature such as, for example, [+plural] in one language is exactly the same as [+plural] in another language (Lardiere, this issue: 215) and asserts that the exact specification of each feature should depend on the system of features, of which it is a part: [+plural] means 'more than one' in a system with two levels of number but 'more than two' in a system with singular, dual and plural levels. Lardiere argues that the feature re-assembly process in the L2 is understandably arduous and time-consuming, because it involves a complex and frequently confusing learning task that may or may not be supported with abundant evidence in the input.

I wholeheartedly agree with Lardiere's appeal to rethinking the L2-as-parameter-resetting paradigm. However, the pendulum may be swinging a bit too far in the other direction. In demonstrating the complex differences between English, Mandarin and Korean plural-marking, Lardiere (this issue: 210) asserts that 'the plural lexical items in these languages are assembled somewhat differently from each

¹ Interpretable features are believed to come from a universal Conceptual Structure, based on a cognitive ontology of perceived properties of the outside world, while uninterpretable features are part of the syntax module and are responsible for operations like Move and Merge within that narrow component of the grammar. As Lardiere does not make a distinction between these types of features for the purposes of feature re-assembly, I assume she takes the process to apply to both of them equally.

other, each selecting different co-occurring features – e.g. such as definiteness, specificity, (human/non-human) animacy – and different conditioning environments.’ By focusing on the differences and complexities, she highlights the unpredictability of the feature re-assembly process. There is a danger here of sinking into a form of constructionist or similar usage-based model of language acquisition. By constructionist, I mean the assumption that the grammar of a language is an assembly of different grammatical constructions with no inherent similarities computable by parameters; these constructions must be learned one by one based on their frequency in the linguistic input to learners, basically an emergentist assumption. In dispensing with parameters altogether, we will be losing the considerable deductive power of the language learning mechanism, and probably some explanatory power as well. Having reflected on the mismatches and conceptual difficulty of feature re-assembly, it would be profitable now to turn to an investigation of the constraints on feature re-assembly, a direction that Lardiere herself points to in the discussion section. Otherwise we risk losing sight of the facilitative function of UG in SLA.

II Constraints on feature re-assembly

What are some current proposals on what the constraints of feature re-assembly might be? Lardiere discusses Harley and Ritter’s (2002) and Cowper’s (2005) proposals, which base constraints on a language-internal, systematic hierarchy of features. Another proposal she mentions is Kwon and Zribi-Hertz (2004), who explain the French–Korean plural-marking differences in terms of degree of grammaticalization of the respective plural morphemes. The criterion for grammaticalization is proposed to be absence or presence of positive and negative values of features. The more grammaticalized French plural morpheme is said to have a negative value (singular), while Korean displays a weakly grammaticalized, lexical plural (Lardiere, this issue: 211). Both of these proposals concern themselves with overt, lexically encoded features.

I would like to draw attention here to Ramchand and Svenonius (2008; henceforth R&S), a recent proposal that deals with both overt and covert features. The advantage of this proposal is that it supports some explicit testable predictions about difficulty and order of acquisition.

R&S propose that the universal semantic/pragmatic component – what Chomsky (2004) calls the Conceptual–Intentional systems (C–I) and

Jackendoff (2002) calls Conceptual Structure – provides all the different meanings that languages express. ‘The same C–I interpretational mechanisms are available to all languages, and are fed by the same universal syn/sem system. However, the syn/sem system inevitably underdetermines full contextually augmented meaning’ (R&S, 2008: 3). Thus, variation lies in the way languages choose to express those universal meanings: some languages have overt morphemes; other languages allow the context to fix the values of the specific features; still others leave functional morphology under-informative or vague, with the extra information filled in by context only when needed. With C–I and narrow syntax held constant and universal, the lexical information of various grammatical morphemes contains not only functional features, but also information about whether or not meaning values are to be sought in the extralinguistic situation. One implication of this proposal is that syntactic structure is always present, even if a language does not have an overt morpheme for the relevant grammatical meaning.

Take the example of articles. Articles carry grammatical meanings such as definiteness or indefiniteness, specificity, and they also serve as tracking devices of referents in discourse.² Those meanings are available to all natural languages, as reflected in the universal semantic component, because all languages need to express – in one way or another – object uniqueness, familiarity to speaker only, or to speaker and hearer, or lack of such familiarity. The functional category D, standing for determiner, is necessary, provided by UG, and arguably attested in all languages, ones with articles or ones without, so that the noun phrase can be an argument in the sentence.³ What are the possible

² A noun phrase is informally defined as definite if its referent is known to both speaker and hearer, that is, both speaker and hearer have discourse familiarity with the referent, or if the referent is unique in the contextually relevant domain. Otherwise, the noun phrase is indefinite. An indefinite noun phrase is specific if the speaker has its referent ‘in mind’ and intends to refer to it. Otherwise, the noun phrase is non-specific.

³ Even languages without overt articles have functional structure in the noun phrase. For example, Rappaport (2001) shows that extraction out of argument noun phrases in Polish is bad, but extraction out of predicative noun phrases is acceptable, as illustrated below. There is no way to explain this contrast if Polish did not have a DP projection.

- (i) Zlikwidowano klub, którego jestem honorowym członkiem
 they.disbanded club of which I.am honorary member
 ‘They closed the club of which I am an honorary member.’
- (ii) * Zlikwidowano klub, którego wczoraj poznałem honorowego członka
 they.disbanded club of which yesterday I.met honorary member
 ‘They closed the club of which I met an honorary member yesterday.’

mappings between meanings and morphemes attested across languages of the world? We take some examples from various languages in order to flesh out this proposal.

Norwegian and English, belonging to the same language family, both have overt definite articles. However, the distribution and interpretation of these definite articles is different, making them a perfect showcase for illustrating syntax–semantics mismatches among languages. The suffixal article in (1) can encode definiteness when used with a bare noun as in (1), but it must be doubled with a pronominal determiner when an adjective is present (2), a specific morphological requirement of Norwegian and other Nordic languages:

- 1) et hus ~ huset (Norwegian; R&S's examples 8a and 8b)
 a house house-DEF
 'a house' 'the house'
- 2) et stort hus ~ det store huset
 a big.N house the big-WK house-DEF
 'a big house' 'the big house'

Furthermore, R&S (2008: 8) argue that in Norwegian the definite suffix marks specificity while the pronominal determiner marks discourse familiarity. The following examples from Anderssen (2007) demonstrate this. In the example in (3) the noun *bit* 'bit, small piece' does not have the definite suffix and it is interpreted as definite but non-specific, since no referent is established. Including the definite suffix in (4) brings on the specific meaning of the existence of an actual small piece not eaten by the subject (Norwegian, Anderssen, 2007: her examples 10).

- 3) Æ spiste ikke [den minste bit]_i av kaka. # Den_i spiste han Derek.
 I ate not the least bit of cake it ate he Derek
 'I didn't even eat a small slice of the cake. # It was eaten by Derek.'
- 4) Æ spiste ikke [den minste bit-n]_i av kaka. Den_i spiste han Derek.
 I ate not the least bit-DEF of cake it ate he Derek
 'I didn't eat the smallest slice of the cake. It was eaten by Derek.'

For another configuration of possible article meanings across languages of the world, consider Lillooet Salish. Schaeffer and Matthewson (2005) argue that Lillooet Salish marks specificity by a morpheme, but not discourse familiarity. For example in the sentence in (5), the referent of 'the old woman' is in the common ground of (that is, familiar to) speaker and hearer. In both cases, the article chosen is *ti... a*.

In English, the first sentence would have an indefinite article while the continuation sentence would have a definite article (Lillooet, Schaeffer and Matthewson's example 17a).

- 5) ts7a **ti** líl'tm-a smúlhats papt káti7 wa7 t'ak szácen ti ts'lá7-a ...
 here DET old-DET woman always DEIC IMPF go carry DET basket-DET
 'There was this/an old woman_i who was always carrying a basket ...'
 cw7aoz kw-a-s ka qwál'-a **ti** smúlhats-a
 NEG DET-IMPf-NOM OOC speak-OOC DET woman-DET
 'The woman_i didn't say anything.' (from van Eijk and Williams, 1981: 80)

In situations like the one exemplified by (6) the speaker is making an existential assertion about a specific movie known to him/her, but the hearer is unfamiliar with the referent. Again, the article chosen is *ti... a* (Lillooet, Schaeffer and Matthewson's example 18a).

- 6) áts'x-en-lhkan **ti** wa7 qwetsp píktsa i gáp-as
 see-TR-1SG:SUBJ DET IMPF move picture when:PAST evening-3CONJ
 'I saw a movie last night.'

On the other hand, in situations like the one in example (7), no referent is believed to exist by either speaker or hearer. The article chosen is *ku* (Lillooet *et al.*'s example 19a).

- 7) cúz'-lhkan tsa7cw lh-t'íq-as **ku** qelhmémen'
 going:to-1SG:SUBJ happy HYP-arrive-3CONJ DET old:person(DIMIN)
 'If an elder comes, I'll be happy.'

As examples (5)–(7) illustrate, familiarity in discourse is not the basis for article choice in Lillooet; rather, this language's determiners mark specificity.

A final language to consider is Russian. Russian D is present in the syntactic structure but underspecified and null, so that all of its values are fixed by the discourse. For example, some quantificational meanings of the object noun phrases can be deduced from the perfectivity of the verb: noun phrases in imperfective verb sentences are interpreted as non-quantized (8) while the same noun phrases in perfective sentences are for the most part interpreted as quantized (definite and specific).

- 8) ja yel gruši / tort (Russian)
 I IMPF.eat.PAST.1SG pears.ACC / cake.ACC
 'I was eating (**some**) pears / cake.'
 9) ja s-yel gruši / tort
 I PERF-eat.PAST/1SG pears.ACC / cake.ACC
 'I ate **all the** pears / **the whole** cake.'

Now let us put all these options together. The claim is that the grammatical meanings of argumenthood, familiarity (definiteness), specificity and referent tracking are supplied by C-I and have to be marked in all languages. Parametric variation in the lexicon allows Norwegian, English, Salish and Russian to either encode specific meanings in overt morphemes, or allow the context to fix the missing values. Table 1 – adapted from R&S (2008: 9) with additional information from Schaeffer and Matthewson (2005) – captures all the purported parametric options.

Of course, the claim is that the languages featured in the table are really types of languages: Italian and Bulgarian behave like English; Chinese and Hindi are of the Russian type; Samoan may be like Lillooet, etc. Note that in this proposal all of the article meanings are expressed in all types of languages, with two radically different means, context or some sort of morpheme. To reiterate, the general thrust of R&S's (2008) proposal is to claim that the universal computational system is the same for all languages and that certain features are universally present in the syntactic representations constructed by the computational system. At the same time, two things can systematically vary: the features' particular encyclopaedic content, and how much explicit information about the reference of their variables is provided by the morpheme carrier and by the discourse context.

There is a (highly speculative at this point) prediction that this proposal makes about language acquisition: properties encoded by a morpheme will be learned earlier than properties fixed by discourse context. In a way, properties encoded by a morpheme are more strongly syntacticized, or grammaticalized, in Kwon and Zribi-Hertz's (2004) sense of the word. That is, they present a predictable, fixed learning task to the learner (child L1, child L2 or adult L2): the inflectional morpheme always appears in the same extralinguistic context with the

Table 1 Crosslinguistic options for mapping meanings generally encoded by definite articles onto morphemes or discourse-pragmatics

Meanings	Norwegian	English	Lillooet Salish	Russian
Argumenthood	morpheme	morpheme	morpheme	null morpheme
Familiarity	morpheme	morpheme	discourse	discourse
Specificity	morpheme	discourse	morpheme	discourse*
Referent tracking	discourse	discourse	discourse	discourse

Note: *Aspect as well as word order – not only extra-linguistic context – may have an effect on specificity and quantization in Russian.

same grammatical meaning. When context has to fill in a grammatical feature value, the evidence may not always be uniform and consistent; it may depend on astute observation of the surrounding extra-linguistic situation. It is even possible that a degree of cognitive maturation is necessary before the child learner can go from discourse observation to generalization of meaning to mental representation.

For the adult L2 learner faced with the task of acquiring functional features, cognitive maturation does not play a role any more, but another important factor might: the native language. What happens if the L1 fixes a feature value through context, while the L2 uses a morpheme? For example, take Russian native speakers learning English articles (see Table 1). This learning situation has been extensively studied in the work of Tania Ionin and co-workers. Indeed, these learners are aware that they need to use overt morphemes, but they fluctuate between encoding specificity and encoding definiteness (i.e. familiarity and uniqueness) in their use of English definite articles (The Fluctuation Hypothesis; Ionin *et al.*, 2004). Indeed, as R&S (2008) contemplate, if for some reason a reference-tracking morpheme is acquired earlier in one language than another,⁴ the early acquirers attend to aspects of discourse reference and get constant input in order to fix their representations, at a time when the late acquirers do not attend to discourse that much. They speculate that ‘this leads to systematic differences in the way discourse is handled in the grammar’ (R&S, 2008: 13). This speculation is certainly on the right track for explaining the Fluctuation Hypothesis and Ionin’s findings.

III Predictions of feature re-assembly

Finally, I articulate some predictions of Lardiere’s own Feature Re-assembly Hypothesis, although she does not spell them out in this way. I believe that it follows from her proposal that learning situations where a mismatch between L1 and L2 grammatical features requires re-assembly would be harder for the learner, compared to situations

⁴ As R&S argue, some notion of specificity is morphosyntactically encoded in Norwegian while it is left up to context in English. They discuss evidence from Anderssen (2005), pointing to an earlier acquisition of the Norwegian definite suffix. Around age two, the Norwegian child is using the definite suffix in 82% of obligatory contexts, while the English two-year-old uses *the* in around 40% of the contexts in which adults would use it. One possible explanation of this fact, proposed by Anderssen (2005), is morphological salience, a suffix being more salient than an unstressed pronominal functional morpheme.

a relativized noun phrase and its relative pronoun. (For details, see the original study; for similar findings, see also Franceschina, 2001; for conflicting findings, see White *et al.*, 2004.)

However, even if there is a complete match of features, morphological acquisition is by no means a walk in the park. It seems that even simple mapping between L1 and L2 morphemes carrying exactly the same grammatical meanings can also present considerable difficulties. In a recent experimental study, Slabakova and Gajdos (2008) investigated knowledge of uninterpretable person and number features, as exemplified by the auxiliary verb *sein* ('to be') in English–German interlanguage. These features are exactly the same in the two languages and the learners were certainly exposed to forms of the verb 'to be' from day one in the classroom. We found that beginners with 40 hours of exposure and intermediate learners with 140 hours of exposure to German (first and second year of a university German class, respectively) were remarkably inaccurate at choosing the correct pronoun and DP subjects for the provided forms of *sein*. Table 2 summarizes the findings. We argue that such high error rates are not predicted by the Feature Re-assembly Hypothesis. While pronoun–auxiliary collocations (*I am, you are*, etc.) can be learned as chunks, DP–auxiliary agreement has to be calculated online in the syntax, and two years of classroom exposure does not seem to be sufficient for this very simple mapping of features. The unexpected low accuracy of the learners in this study suggests that feature re-assembly does not fully explain the learners' difficulties with inflectional morphology, and that we should be looking for additional factors, possibly processing, to account for the errors.

Table 2 Percentage errors in all forms of *sein* depending on type of subject

Types of error	Beginners	Intermediate
Errors in choosing correct pronoun subjects	7.50	4.50
Errors in choosing correct DP subjects	20.18	29.80

IV Conclusions

In summary, Lardiere's Feature Re-assembly Hypothesis appropriately emphasizes the real bottleneck of second language acquisition: acquisition of the inflectional morphology as repository for interpretable and uninterpretable grammatical features. But while the focus is on investigating why acquiring inflectional morphology is so hard, we must always seek out the universal constraints on feature assembly and re-assembly,

because language variation is not limitless and because constraints and predictions of learner behaviour make second language acquisition an interesting area of investigation for cognitive science. The magnitude of the learning task may vary in many respects, but learner behaviour is still predictable. In this commentary, I have highlighted a recent theoretical proposal that locates linguistic variation in the functional lexicon. Combined with the logic of feature mapping – with and without re-assembly – this is a proposal that provides testable predictions for the course of SLA; the latter is the essential purpose of any theoretical model.

V References

- Anderssen, M.** 2005: The acquisition of compositional definiteness in Norwegian. Unpublished PhD thesis, University of Tromsø.
- 2007: The acquisition of compositional definiteness in Norwegian. *Nordlyd (University of Tromsø working papers on language and linguistics)* 34(3), 252–75.
- Chomsky, N.** 2004: Beyond explanatory adequacy. In Belletti, A., editor, *Structures and beyond: the cartography of syntactic structures*, volume 3. New York: Oxford University Press, 104–31.
- Cowper, E.** 2005: The geometry of interpretable features: *Infl* in English and Spanish. *Language* 81, 10–46.
- Franceschina, F.** 2001: Against an L2 morphological deficit as an explanation for the differences between native and non-native grammars. In Foster-Cohen, S. and Nizegorodcew, A., editors, *EUROSLA Yearbook*. Volume 1, John Benjamins, 143–58.
- Harley, H. and Ritter, E.** 2002: Person and number in pronouns: a feature-geometric analysis. *Language* 78, 482–526.
- Ionin, T., Ko, H. and Wexler, K.** 2004: Article semantics in L2 acquisition: the role of specificity. *Language Acquisition* 12: 3–69.
- Jackendoff, R.** 2002: *Foundations of language*. Oxford: Oxford University Press.
- Kwon, S.-N. and Zribi-Hertz, A.** 2004: Number from a syntactic perspective: why plural marking looks ‘truer’ in French than in Korean. In Bonami, O. and Cabredo Hofherr, P., editors, *Empirical issues in formal syntax and semantics* 5, 133–58.
- Ramchand G. and Svenonius, P.** 2008: Mapping a parochial lexicon onto a universal semantics. In Biberauer, M.T., editor, *Limits of syntactic variation*. John Benjamins: Amsterdam, 219–45. Available online at <http://ling.auf.net/lingbuzz/000346> (December 2008).
- Rappaport, G.** 2001: Extraction from nominal phrases in Polish and the theory of determiners. *Journal of Slavic Linguistics* 8, 159–98.

- Sabourin, L., Stowe, L. and de Haan J.** 2006: Transfer effects in learning a second language grammatical gender system. *Second Language Research* 22, 1–29.
- Schaeffer, J. and Matthewson, L.** 2005: Grammar and pragmatics in the acquisition of article systems. *Natural Language and Linguistic Theory* 23, 53–101.
- Slabakova, R and Gajdos, J.** 2008: The Combinatory Variation Hypothesis in the second language. In Gavarró, A. and João Freitas, M., editors, *Proceedings of the Generative Approaches to Language Acquisition conference*. Barcelona. Cambridge Scholars Publishing.
- van Eijk, J. and Williams, L.** 1981: *Lillooet legends and stories*. Mt. Currie, BC: Ts'zil Publishing.
- White, L., Valenzuela, E., Kozłowska-Macgregor, M. and Leung, I.Y.-K.** 2004: Gender and number agreement in nonnative Spanish. *Applied Psycholinguistics* 25, 105–33.