Creoles as interlanguages: syntactic structures

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1. Introduction[1]

In my previous Column (Plag 2008) I discussed the hypothesis that creoles originate as conventionalized interlanguages of an early developmental stage. For the sake of convenience I will refer to this specific hypothesis as the 'interlanguage hypothesis'. While the idea that processes of second language acquisition (SLA) are a crucial ingredient to creole genesis is far from new or original (see Plag 2008 for some discussion and further references), it is still controversial which kinds of interlanguage processes are relevant, and how much of a given creole's structures can be attributed to such processes. In the said Column, I took a closer look at inflectional morphology and showed that certain facts about creole languages are best explained by making reference

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to current theories of SLA such as Processability Theory (e.g. Pienemann 1998, 2005a). Thus, it can be argued that both the loss of inflectional morphology and the preservation (if any) of primarily inherent inflection[2] can be accounted for under the interlanguage hypothesis. In the process of acquiring a second language, inflectional morphology, and so-called contextual inflection[3] in particular, develops rather late as the predictable consequence of the limited L2 processing capacities that are characteristic of the early stages of SLA. Under the interlanguage hypothesis, the striking parallelisms between the nature of inflectional morphology as observable in early interlanguages and in creoles are thus convincingly accounted for.

The present article extends this line of inquiry to syntax in a (necessarily rather) programmatic sketch of three types of syntactic constructions across creoles, i.e. basic word order, question formation, and clausal negation. As we will see, the interlanguage hypothesis allows us to shed new light on important problems that are still not satisfactorily solved in our field. One problem is that it is still largely unclear which mechanisms are responsible for the allegedly unmarked nature of many linguistic structures across creoles. Clausal negation, basic word order, and question formation are cases in point, and I will use these constructions as case studies to show that modern theories of second language acquisition can help us to understand these phenomena better. Another, related, major concern is how to determine whether a given structure in a given creole language is really the result of substrate transfer (see Siegel 2008 for a recent overview). Especially challenging in this respect are cases where substrate influence and 'universal tendencies' seem to converge. It should be noted, in addition, that the nature of these 'universal tendencies' is rather unclear and generally left unexplained. In this paper, I will argue that the 'universal tendencies' in creoles can be accounted for as results of limited processing capacities in second language acquistion, and that limited processability also constrains transfer in interesting ways.

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[2] Inherent inflection "is the kind of inflection that is not required by the syntax but has syntactic relevance. Examples are the category number for nouns, comparative and superlative degree of the adjective, and tense and aspect for verbs" (Booij 1995:2).

[3] Contextual inflection is "dictated by syntax, such as person and number markers on the verbs that agree with the subject and/or objects, agreement markers for adjectives, and structural case markers on nouns" (Booij 1995:2).

The paper is structured as follows. I will start the discussion of syntactic aspects of the interlanguage hypothesis in section 2 with some remarks on the problem of transfer and a short introduction to Processability Theory, a psycholinguistic theory of SLA in which most of our discussion will be framed. Sections 3 through 5 will each deal with one aspect of clausal syntax. In section 6 I will summarize the results.

2. Interlanguages, creoles, transfer and Processability Theory

The interlanguage hypothesis rests on the idea that there are non-accidental similarities between interlanguages and creoles, and between interlanguage development and pidginization/creolization. It is generally accepted that SLA plays a role in the formation of creole languages, and it is primarily in the discussion of substrate transfer that mechanisms of SLA are evoked. As already argued in my first Column, the restriction to transfer in the debate of SLA influence is an unwarranted narrowing of perspective. Parallelisms between creole formation and SLA extend beyond transfer and are helpful in reaching a better understanding of creole languages and the mechanisms by which they come about. Apart from transfer, these parallelisms concern the developmental aspects of interlanguages and creoles, the nature of variability in interlanguages and across creoles, the role of interaction, and the role of the age factor. The remainder of this article will be chiefly concerned with transfer and developmental aspects, but before turning to these aspects I will briefly discuss the other three points, i.e. variability, interaction and age.

A striking paralellism between SLA and pidginization/creolization is what is called in SLA research the variability in 'attainment', a term that is used in SLA to describe the degree of approximation of the learner variety to the target language. Although the term 'attainment' is inadequate in a pidginization/creolization context (see, for example, Baker 1994, for discussion), it has a clear correspondent in the field of creole studies in what is known as the 'proximity to the superstrate'. Creoles differ considerably along this dimension, and it seems that, as in SLA, this variability is crucially dependent on the nature of the interaction between the (groups of) speakers involved in the contact situation. This interaction is characterized by different degrees

of limited access to the lexifier language, of limited participation in institutions and practices mediated by language, and no or little motivation to learn the superstrate. Input and interaction, as well as attitude and motivation are also known to have a significant influence on attainment in SLA, with late onset of acquisition, little and highly variable input, and negative attitude toward the second language (or its speakers) all contributing negatively. In the creolization context, analogous disfavorable conditions of interaction usually hold, in that we can generally assume a rather restricted availability of the superstrate, or only access to a reduced variety of it, and often negative attitudes towards the superstrate culture and language.[4]

Another parallellism between interlanguages and creoles is the role of the age factor. This is very well researched in SLA (see e.g. Hyltenstamm & Abrahamsson 2003 for an overview), and there is a general consensus that older learners, especially adult ones, are less successful learners than younger ones. Furthermore, the attainment of adult learners is more sensitive to sociological, socio-cultural and psychological factors. In the creolization context, we are primarily dealing with adult acquisition in less favorable socio-cultural and psychological conditions, hence a lower degree of approximation is generally to be expected.

What all these considerations of the parallisms between SLA and creolization boil down to is that we would expect creoles to pattern rather with interlanguages of an early stage than with more developmentally advanced interlanguages. If we find creole structures corresponding to more advanced interlanguage stages, these structures should be explainable in terms of external factors, e.g. the longer availability of the superstrate, or closer intercultural interaction (see, for example, Winford 2003:304-313 for general discussion and illustration).

Turning now to the question of transfer and developmental aspects of the interlanguage hypothesis, we will see that SLA theories that try to explain some universal characteristics of interlanguage can be used as heuristic tools for the study of creole formation in a cross-linguistic perspective. With regard to transfer in SLA, it is now generally accepted that transfer may occur in all subsystems, with perhaps special

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[4] The above remarks refer of course to the period before the target shift. I assume this period to be part of the potentially larger period in which creolization may occur (see, for example, Veenstra 2003:306-310 for more detailed discussion)

prominence in phonology. Transfer occurs across different social contexts (formal, informal, instruction, etc.), and at all ages. Finally, transfer in SLA seems to be constrained by processing factors (see more on this below).

As has been pointed out before by authors such as Bickerton (e.g. 1981, 1984, 1992), finding good evidence for transfer can be quite problematic. Even if the right speakers were in the right place at the right time (Bickerton 1984: 183), in order to classify a given phenomenon as a case of transfer, it is not enough to show that an L1 structure is very similar to the corresponding interlanguage structure. Crucially, and this a neglected point in the discussion, it would be necessary to show in addition that the structure does not universally arise in second language development, irrespective of the native language of the learner. Although more recent creole studies have argued for transfer on the basis of less common features (see, for example, the papers in *JPCL* 22.1), often sheer structural similarity has been taken as evidence for substrate transfer.

In (1), I give a schematic representation of this assumption, which goes like this: If a given structure is present in the interlanguage, and present in the L1/substrate, but absent from the L2/superstrate, the presence of the structure in the interlanguage/the creole is the result of transfer. This pattern is given in (1a). If, on the contrary, a structure is absent from the L1/substrate, and absent from the L2/superstrate, this structure does not occur in the interlanguage. This pattern is depicted in (1b).

(1)   The assumption: Structural similarity as evidence for transfer

		L1	L2/ lexifier	interlanguage/ creole
a.	feature x	+	-	+
b.	feature x	-	-	-

If we take the facts from SLA into account, however, the picture becomes much more complicated, as schematized in (2).

(2) The facts

(e.g. Felix 1977, Pienemann, Di Biase, Kawaguchi, & Håkansson 2005a and 2005b)

		L1	L2	interlanguage
a.	feature x	+	-	+
b.	feature x	+	-	-
c.	feature x	-	-	+ (!)
d.	feature x	+	+	- (!)

In addition to what (1) suggests, we find attested in interlanguages the unexpected emergence of totally new structures, as in (2c), and the loss of structures that are shared by both languages involved, as in (2d). To give an example of these two problematic patterns, let us consider a case of word order acquisition, in which both languages involved, Swedish L1 and German L2, share the same feature, namely inversion (or Verb Second) in main clauses. In both languages the fronting of adverbials without inversion is ungrammatical, as shown in the first two columns of table (3). In spite of this close similarity in structure, Swedish learners of German all undergo the same three stages in acquisition, starting with SVO, followed by the fronting of adverbials without inversion at the next stage, and Verb Second emerging only at the third stage of acquisition (e.g. Håkansson et al. 2002).

(3) Inversion (e.g. Håkansson et al. 2002)

L1: Swedish	L2: German	interlanguage stages
V2nd	V2nd	1. SVO
*ADV SVO	*ADV SVO	2. ADV SVO
		3. ADV V SO

Hence we see that, as schematized in (2d), although both languages share the same 'feature x' (i.e. Verb Second), there is no transfer of this feature at the first two stages of acquisition. The case of Swedish and German is also instructive as an illustration of the pattern in (2c). Although neither language is an SVO language, this word order is the first to be used by the learners. In fact, it seems that all learners, irrespective of native language and target language, start out with SVO or SOV as the first word order stage
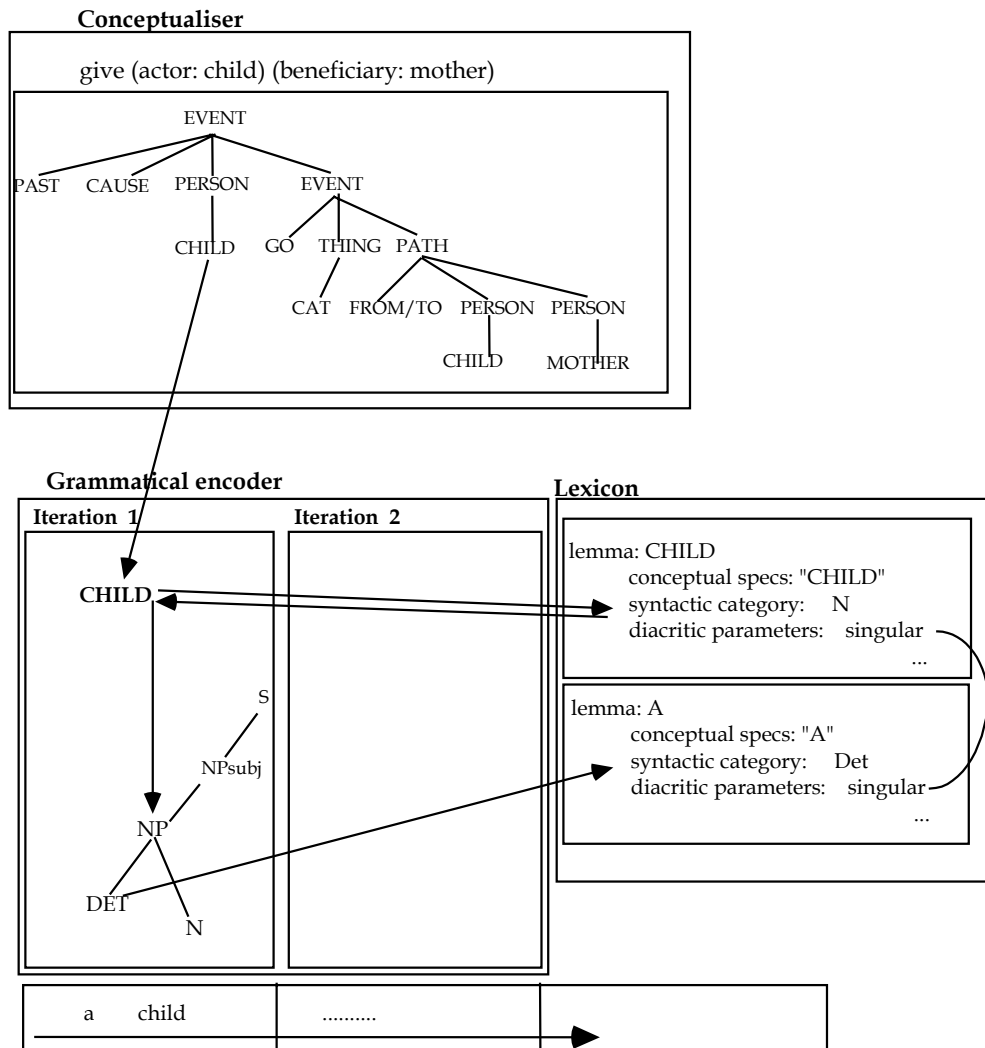
(Pienemann 2005a, see below for more discussion). This has serious consequences for the argumentation *pro* transfer in general. If learners show a given feature (such as SVO) irrespective of their mother tongues, the occurrence of that feature in any interlanguage cannot be taken as evidence for transfer, even if the mother tongue of a learner has this feature.

The question is of course which features show which kinds of pattern. In other words, one would like to have a theory that can determine which kinds of features are due to universal stages of interlanguage development, and which features are due to transfer. One theory of SLA that provides valuable insights in this respect is Processabiliy Theory (Pienemann 1998 et seq.), to which we now turn.[5]

Processability Theory is a theory of interlanguage development that builds on psycholinguistic models of speech production as developed by, for example, Levelt (1989), or Kempen and Hoenkamp (1987). According to the theory, there is a universal, implicational hierarchy of processing procedures derived from the general architecture of the language processor. In addition and related to that, there are specific procedural skills needed for the production of utterances in the language to be learned, the target language. Based on these assumptions, predictions can be made for second language development which can be tested empirically. How does that work in detail? For illustration, have a look at the production of a sentence such as 'A child gave her mother a cat', partially illustrated in (4).

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[5] The following short overview of Processability Theory is largely taken from my previous Column (Plag 2008). Readers of that Column may wish to immediately turn to the discussion of transfer in Processability Theory below ex. (9). See also Field (2004) for the first attempt to use Processability Theory in the creole context, and Winford (2006a, b).

(4)   Incremental language generation (Pienemann 1998:68)

In order to produce the first NP of this sentence, a preverbal message has to be generated in what Levelt (1989) termed the conceptualizer. The conceptualizer then passes the concept CHILD on to the grammatical encoder, which is responsible for generating the pertinent syntactic structure, in this case an NP. Part of the process of generating a phrasal constituent is that lexical items have to be retrieved from the lexicon. The selection of the lemma CHILD gives us the category N, which in turn triggers the building up of an NP. This involves at least the following tasks:

• providing the syntactic structure in which lexical items can be inserted,

• finding the morphosyntactic features that match the conceptual structure, e.g. [+ indefinite],

• selecting the feature [singular] for the lemma CHILD,

- matching the features of items that may potentially be inserted under the DET node of the NP with that of the lemma just selected to function as the head,

- retrieving the pertinent lemma, i.e. A, from the lexicon, and

- finally passing on the resulting structure to further processing units, such as the phonological encoder and the articulator (cf. Levelt 1989).

This small example illustrates already a fundamental characteristic of speech production, incrementality. Linguistic structure is gradually built up while conceptualisation is still taking place. On top of that we see that subsequent processing procedures often have to work with the still-incomplete output of the previous process, which necessitates that incomplete intermediate output has to be kept available in short-term memory. Language production thus involves substantial parallel processing, high short-term memory costs, and the availability of specialized processing routines for all kinds of linguistic structure. In particular, Pienemann (e.g. 1998:7) posits the following processing procedures and routines:

(5)   Processing procedures

1. lemma access
2. the category procedure
3. the phrasal procedure
4. the sentence-procedure (S-procedure)
5. the subordinate clause procedure - if applicable

These processing procedures form an implicational hierarchy, i.e. each of these procedures necessitates the existence of the one above it. For example, the category procedure is a prerequisigte for the phrasal procedure, which in turn is a prerequisite for the sentence-procedure, etc. The workings of the phrasal and S-procedures is illustrated with the example in (4), taken from Pienemann (2000):

(6)   Phrasal and S-procedures illustrated

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                          S
                  _____/ _____
             NP_subj              VP
               |              ___/  \___
               N            V           NP_obj
               |            |           / \
               |            |         Det   N
          ____|_____        |          |    |
         /          \      / \        / ____|____
        (  Peter      owns )  (  a   dog )        \
         _____/        _____/           \
        /                              \            \
   interphrasal information exchange    intra-phrasal information exchange
          (S-procedure)                       (phrasal procedure)
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During the phrasal procedure, the morphosyntactic features of the constituents are matched. In other words, this procedure is responsible for the exchange of grammatical information within the phrase. Note that without the previous procedures of lemma access (which provides the lexical material with its diacritic features) and the category procedure (which gives us the syntactic category information that we need to build up further structure) intra- and interphrasal information exchange would be impossible. Looking at the S-procedure we realize that in order to do subject-verb agreement we need the right syntactic configuration that allows us to match the pertinent grammatical information (in this case 3rd person singular). Crucially, it is only the S-procedure that allows us the exchange of grammatical information between phrases, in this case the VP and the subject NP.

The central claim of Processability Theory now is that these processing procedures not only reflect their sequence of activation in language generation but also that the acquisition of these procedures will follow this implicational hierarchy. The table in (7) illustrates the developmental stages of SLA in a hypothetical hierarchy. In the top row t_1 through t_5 are five points in time at which different stages of development can be discerned. Note that empirical evidence shows that a simplified S-procedure is available already at a rather early stage, a point to which I will return shortly.

(7)   Hypothetical hierarchy of processing procedures (source: Pienemann 2000:108)

	t_1	t_2	t_3	t_4	t_5
S'-procedure (EmbeddedS)	-	-	-	-	+
S-procedure	-	simplified	simplified	inter-phrasal information exchange	inter-phrasal information exchange
phrasal procedure	-	-	phrasal information exchange	phrasal information exchange	phrasal information exchange
category procedure (lex. categ.)	-	lexical morphemes	lexical morphemes	lexical morphemes	lexical morphemes
word/ lemma access	+	+	+	+	+

At stage t_1 the learner is only able to produce one-word or formulaic utterances, with unclear category status of the lemmas retrieved from the lexicon. At stage t_2, the learner retrieves lexical morphemes and can form very simple sentences of the type NVN or NNV (corresponding to target SVO or SOV), which is an indication that the lexical morphemes have a category specification at this point. t_3 shows evidence of intra-phrasal information exchange, to the effect that we find NP-internal agreement, but, crucially, not yet subject verb-agreement. At t_4 we have a fully developed S-procedure, and at t_5 sentence embedding is possible.

Before returning to creoles let us further illustrate the processing hierarchy with data from English. It has been observed that second language learners of English follow universally the developmental path depicted schematically in (8). The rightmost column of the table in (8) gives the processing stage according to Processability Theory, as shown in (9) below:

(8)   Developmental stages in English interlanguage syntax (source: Pienemann 2000)

development	structure	example	processing stage
initial state	One-word utterances	*ball*	1
	Canonical word order	*Bob kick ball* ('SVO')	2
	Neg + V	*He no like coffee.*	3
	Adverb Fronting	*Then Bob kick ball*	3
	Topicalization	*That I didn't like.*	3
	Do-Fronting	*Do you like it? Do she like it?*	3
	Yes-no Inversion	*Has he seen you?*	4
	Copula Inversion	*Where is John?*	4
	Particle Verbs	*take the hat off*	4
	Do/Aux 2nd	*Why did he sell that car? Where has he gone?*	5
target	Cancel Inversion	*I wonder why he sold that car*	6

Starting out with one-word utterances, learners gradually acquire more complex structures in a specific order, with at least some learners ending up with the most complex structure, the canceling of inversion in subordinate interrogative clauses. The table in (9) shows the corresponding processing procedures:

(9)   Processing procedures for English (source: Pienemann 2000)

Stage	Processing procedure	L2 processing	morphology	syntax
1	word/ lemma	words	invariant forms	single constituent
2	category procedure	lexical morphemes possessive pronouns	plural on nouns	canonical order 'SVO'
3	phrasal procedure	intra-phrasal information exchange	NP agreement Neg+V	ADV, *do*-fronting topicalization
4	S-procedure/ word order rules	inter-phrasal information exchange		Y/N inversion, copula inversion
5	S-procedure/ word order rules	inter-phrasal information exchange	SV agreement (3sg –*s*)	Aux/*do* 2nd
6	subordinate clause procedure	main and subordinate clauses		cancel inversion

An obvious question is whether the proposed processing procedures and implicational acquisition stages can be set up for any language. Over the past decade, Pienemann and colleagues have tested the rather strong predictions of Processability Theory on a number of different target languages (involving also different L1s) and it is safe to say that there is ample evidence in favor of the processing and developmental hierarchies as posited by Processability Theory (cf. e.g. the papers in Pienemann 2005a).

How does transfer come into play under the tenets of Processability Theory? According to the Full Transfer Hypothesis advanced, for example, by Schwartz and Sprouse (e.g. 1996), learners start from their L1 grammar, i.e. the initial state of interlanguage is claimed to be equal to the final state of L1. Among other things, this predicts transfer effects across the board from the very beginning. In contrast to this position, Pienemann and colleagues developed the so-called Developmentally Moderated Transfer Hypothesis (e.g. Pienemann, Di Biase, Kawaguchi, & Håkansson 2005a and 2005b, Pienemann & Håkansson 2007), which claims that learners do not start from their L1 grammar, but use the L2 processing procedures available at the time. According to this position, L1 transfer will not occur across the board, but when the structure to be transferred is processable within the developing L2 system. That is, the interlanguage processor must have the very procedure at its diposable that is required for the processing of the L1 structure to be transferred. The crucial difference between the two positions is the timing of transfer, not the occurrence of transfer as such. The Developmentally Moderated Transfer Hypothesis does not deny transfer effects but claims that transfer is constrained by L2 processability. Evidence for this hypothesis comes, for example, from the acquisition of German split verb constructions by Turkish learners (Haberzettl 2005), or from the acquisition of German Verb Second word order by Swedish learners (e.g. Håkansson et al. 2002, already mentioned above). I will explain in more detail the case of the Turkish learners of German.

In German main clauses, auxiliary verb and main verb are 'split' in the sense that the auxiliary occurs in second position (after any kind of first position constituent) and the verb at the end of the clause in post-object position, resulting in an OV word order. One could thus, in accordance with the Full Transfer Hypothesis, predict that Turkish learners transfer their L1 OV word order in split verb constructions from the beginning. However, the Turkish learners all first go through a stage in which they show S AUX V

O word order. The crucial argument for a transfer effect is that beyond the initial stage they acquire the split verb construction generally faster than learners without OV in their respective mother tongues. But this effect only occurs after their having mastered the first, non-target-like stage, i.e. the effect emerges at a time when the processing system is able to reorganize the interlanguage grammar by making use of the pertinent L1 knowledge. (10) schematizes the phenomenon at hand.

(10)   Split verb constructions (e.g. Haberzettl 2005)

	L1: Turkish	L2: German	interlanguage stages
word order	OV	V2nd, e.g. X AUX (Y) OV	1. S AUX V O 2. X AUX (Y) OV

This example nicely shows that transfer occurs if processing allows transfer, i.e. at the appropriate stages of the hierarchy, i.e. not initially in this particular case.[6] In other cases, transfer may already occur at initial stages, provided the structures are processable already at that stage. Basic word order transfer (e.g. L1 SOV) would be a case in point, as will be discussed in more detail in the next section.

Having explored the basic insights of Processability Theory I will now return to creole languages in order to illustrate how these insights may help us to understand better the cross-linguistic prevalence of certain types of structure in these languages. Furthermore, Processability Theory can be used as a diagnostic tool to differentiate cases of transfer from cases of non-transfer in the emergence of certain creole structures.

3. Basic word order: SVO, SOV

Cross-linguistically, after an initial stage of exclusively formulaic or one-word utterances, second language learners start producing predominantly sentences with what is known as 'canonical word order', i.e. SVO or SOV, irrespective of L1 and L2 (cf.

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[6] Note that this statement, phrased in the psycholinguistic terms of Processability Theory, is reminiscent of earlier approaches in SLA, according to which for a feature to be transferred, it must have "somewhere to transfer to" (Andersen 1983).

e.g. Håkansson et al. 2002:253). Using the terminology of Lexical Functional Grammar, Pienemann, Di Biase & Kawaguchi (2005) explain the learners' initial behavior as the consequence of a fixed association between argument structure, functional structure and constitutent structure, termed 'unmarked alignment' (2005:229):

> The Unmarked Alignment Hypothesis
>
> In second lanaguge acquisition learners will initially organise syntax by mapping the most prominent semantic role available onto the subject (i.e. the most prominent grammtical role). The structural expression of the subject, in turn, will occupy the most prominent linear position in c-structure, namely the initial position.

This direct mapping does not require any language-specific processors or memory stores, which in turn allows the learner to produce target-like SOV or SVO sequences, even if their L1 does not have the respective constituent order. We know, however, also of learners that seem to transfer their basic SOV or SVO word order (see, for example, Odlin 1990 for an overview of some cases). This is possible also from a processability point of view since the L2 processor is already at a stage where it can (talking in LFG parlance) unify the pertinent lexical features, analogous to a corresponding process in L1, if available.

This theory correctly predicts (see Di Biase and Kawaguchi 2002) that, for example, English learners of Japanese can produce SOV (subject–object–verb) from the time they produce the first sentences, instead of necessarily transferring native SVO (as predicted by the Full Transfer Hypothesis). For the problem of transfer vs. universal development this state of affairs means that neither SOV nor SVO word orders produced by SLA learners can be regarded as clear instances of L1 transfer, even if the L1 has the pertinent structure. Both word orders are processable at a very early stage of L2 acquisition.

Let us now look at creole languages and their basic word orders. (11) gives some examples, again with the respective structures from the lexifier and substrate languages:[7]

(11)   a. Haitian (e.g. Lefebvre 1998, Lefevre & Brousseau 2002)

        Haitian: S AUX VO

        Gbe :   S AUX VO / OV

        French: S AUX VO

    b. Sranan (e.g. Bruyn 2002:175)

        Sranan: S AUX VO

        Gbe: S AUX VO / OV

        English :   S AUX VO, X S AUX V

    c. Palenquero (e.g. Schwegler 1991, Bentley 1887, Laman 1936)

        Palenquero: S AUX VO

        Kikongo: S AUX VO

        Spanish: S AUX VO

    d. Negerhollands (e.g. Muysken 2001)

        Negerhollands: S AUX VO

        Kwa: S AUX VO

        Dutch: V2nd, X AUX SOV

    e. Berbice Dutch (e.g. Kouwenberg 1992, 1994a)

        Berbice Dutch: S AUX VO

        Eastern Ijo: SOV

        Dutch: V2nd, X AUX SOV

All creoles in our small sample have a word order that corresponds to 'canonical word order' in SLA. Again we see close parallels between early interlanguage structures and creole structures, and again we see that transfer cannot sufficiently explain the emergence of the respective structures. In many cases, lexifier and substrates share the

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[7] I only include here clauses with full NP subjects and objects. Pronominal objects (e.g. in French, but also in Gbe) may show a distinct syntactic behavior. I thank Tonjes Veenstra for pointing this out.

same word order, but this alone is neither a sufficient nor a necessary condition for transfer, as argued above.

In cases of differences in word order between lexifier and substrates we find that the creole usually converges on S AUX V O. For example, Berbice Dutch emerges with SVO from a contact situation with verb second and OV word orders in the input languages, and Haitian and Sranan manifest SVO in a situation where the substrate allows also OV in certain constructions.

According to the interlanguage hypothesis we would also predict that some creoles have SOV. This is indeed the case, as Nagamese (restructured Assamese) shows:

(12)   Nagamese (Bhattacharjya 2007:240)
        Kikatemla modu   kha-yas-ile
        Kikatemla wine   eat-PROG-PAST
        'Kikatemly was drinking wine'

Overall, the interlanguage hypothesis in conjunction with Processability Theory can nicely account for the fact that cross-linguistically in creole languages, we find basic word orders reflecting unmarked alignment, with no conclusive evidence in favor of transfer in this domain.

4. Question formation

According to Processability Theory, *wh*-fronting occurs at stage 3 of the processability hierarchy. The fronting (or topicalization) of constituents without accompanying inversion does not involve information exchange between different constitutents within the clause (as, for example, in subject-verb agreement), but only necessitates the availability of the phrasal procedure and of the topic position of the clause. At stage 3 this position is available (see again, for example, (8) and (9) above), but at this stage this topic position can only be filled by very specific lexical material, e.g. members of the

classes '*wh*-word' or 'adverb' (Pienemann 2005b:26).[8] Inversion of subject and verb, which characterizes mainly Indo-European languages, Germanic ones in particular (e.g. Siemund 2001), is only possible at higher stages of SLA development because it involves more complex processing procedures at the sentence level. As shown in (9) above, *wh*-movement accompanied by inversion is a stage 5 process. Cross-linguistically, inversion is rare, while the positioning of *wh*-elements in initial position is quite common.

In Veenstra's (2007) sample it turns out that for polarity questions (also known as 'yes/no-questions') the majority of creoles chooses simply intonation to mark the interrogative status of the sentence, while Haitian, Saramaccan and Lesser Antillean employ initial or final question particles. With regard to constituent interrogatives, the majority of creole languages have clause-initial *wh*-constituents, sometimes accompanied by a focus marker.

How does that fit with the interlanguage hypothesis? Simple intonation and *wh*-initial clauses correspond to early stages of SLA development irrespective of L1 and L2, but how about initial or final question particles? Given that such particles do not necessitate information exchange at the sentence level, such particles can be processed already at the phrasal stage, similar to fronted *wh*-constituents. Hence such structures would at the same time be candidates for early transfer under the Developmentally Moderated Transfer Hypothesis. If we now take a look at those creoles that have such structures, we find that the substrate languages involved do indeed have such particles.

For instance, Gbe, one of the major substrates of both Haitian and Saramaccan, has a clause-final question marker *à* (Lefebvre & Brousseau 2002:124), which would be a prime candidate for transfer. This may have been transferred into Saramaccan, which also has a clause-final marker, but why does Haitian, which has the same substrate language an initial marker of polarity questions? One potential explanation may be that at an earlier stage, Gbe may have had also a clause-initial particle, as suggested by Delafosse (1894:61-62, cited after Lefebvre & Brousseau 2002:140), but the latter authors dismiss Delafosse's remarks as unreliable. A possible explanation for the differential behavior of Haitian and Saramaccen, however, seems to be the difference between the

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[8] The availability of this position then paves the way for the occurence of other material, such as periphrastic *do* in English interlanguage, as in *Do she see me?* (Pienemann 2005b:27).

two superstrates, with French having a construction that could be analyzed as a clause-initial question marker (*est-ce que*).

To summarize the discussion of question formation, the pattern found in creoles can be nicely accounted for under the interlanguage hypothesis. Cross-linguistically, we find structures in creoles that correspond to early stages of SLA, with transfer effects in particular languages that are in accordance with the Developmentally Moderated Transfer Hypotheses. Crucially, question formation involving inversion, which would correspond to a very advanced SLA stage, seems not attested in creole languages.

5. Negation

There are many studies available on clausal negation in creole languages, and often the question of substrate transfer is raised (e.g. Siegel 2000, Schneider 2000, Holm 2007, and the references cited below). For English-based pidgins and creoles, Schneider (2000:211) claims that a single pre-verbal negator *no* (or some other form of that function, one should add) is "practically universal", and many creoles with non-English lexifiers show an analogous structure. On the one hand, this pattern has been suggested to be of substrate origin (e.g. Todd 1991: 21, Holm 1988: 172 for English), on the other hand this type of negation is cross-linguistically very wide-spread and seems to reflect a "natural universal tendency" among the world's languages (Dahl 1979: 95). Preverbal negation with a single element is therefore one of the pertinent cases of seeming convergence of substrate substrate influence and 'universal tendencies'. In the following, we will see that preverbal negation is also an example of a structure where these 'universal tendencies' in creoles can be accounted for as results of limited processing capacities in second language acquistion. Let us first illustrate this with English interlanguage in (13).

(13)   Developmental sequence for L2 English (Larsen-Freeman/Long 1994:94, Pienemann 2000:111)

Stages	Examples	processing procedure
1. clause-external	*No this one* *Not you playing here*	category procedure
2. clause-internal, pre-verbal	*Juana no have job* *You not go*	phrasal procedure
3. auxiliary + negation	*I can't play the guitar*	S-procedure
4. analysed *don't*	*She doesn't drink alcohol*	S-procedure

The table in (12) shows that, irrespective of their mother tongue, second language learners of English pass through four stages. They start out with clause-external negation, followed by placement of a negator before the verb phrase, followed by the two-step acquisition of the complex interaction between auxiliaries and the negation marker *not*. Similar sequences exist with other L2s, irrespective of L1 and L2. In terms of Processability Theory, this acquisition sequence can be explained by and follows from the gradual build-up of the necessary processing procedures in the learner's interlanguage. In particular, preverbal negation is located at stage three of the processability hierarchy (cf. (9) above), which is a relatively early stage.

Let us now turn to the creole situation and compare it to negation development in SLA. (13) lists negation patterns from a number of creole languages, with French, Spanish, English and Dutch as lexifiers, and various substrate languages.

(14) a. Haitian: preverbal negation with *pa* (Lefebvre 1998, Lefevre & Brousseau 2002)

Haitian: NEG (AUX) V O

Gbe: NEG (AUX) V O / V O NEG / NEG V O NEG[9]

French: NEG AUX NEG V O

NEG V NEG O

b. Tayo: preverbal negation, postverbal *pa* with fixed expressions (Corne 1999: 58ff)

Tayo: NEG AUX V O

V NEG (*se pa, kone pa*)

Kanak: variable w.r.t. position and means

French: NEG AUX NEG V O

NEG V NEG O

c. Sranan: preverbal negation with *no*

Sranan: NEG (AUX) V O

Gbe: NEG (AUX) V O / V O NEG / NEG V O NEG

mà   ă   mà   ă

English: AUX NEG V O

d. Negerhollands: preverbal negation with *no* (e.g. Muysken 2001)

Negerhollands: NEG (AUX) V O

Kwa: variable

Dutch: AUX NEG O V

AUX O NEG V

e. Palenquero: preverb. neg., clause-final neg., and a combination of both, with *nu* (e.g. Schwegler 1994, Bentley 1887, Laman 1936)

Pal.:	NEG AUX V O	AUX V O NEG	NEG AUX V O NEG
Kikongo:	NEG V	V NEG	NEG AUX V O NEG
Spanish:	NEG AUX V O		NEG AUX V O NEG

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[9] Apart from the preverbal marker *mà* in Gbe there is also the VP-final negative marker *ă*. The latter, however, does not negate the content of the proposition in question, but "appears to express the speaker's disagreement with the content of the proposition" (Lefevre & Brousseau 2002:128), and should therefore be considered a marker expressing the speaker's point of view, rather than a negator proper. It is included in (14a) for the sake of completeness.

f. Berbice Dutch: sentence-final negation with *ka(nɛ)* (e.g. Kouwenberg 1992, 1994b) [10]

Berbice Dutch: VO NEG

Eastern Ijo: OV NEG

Dutch: variable

As we can see from this small survey, preverbal negation is wide-spread among creoles, irrespective of the input languages involved. Following the line of reasoning developed in section 2 above, the fact that an interlanguage or creole pattern is found also in the substrate language(s) is no *a priori* evidence for transfer, especially in those cases in which the pattern in question manifests a universally attested developmental stage in interlanguage development, as is the case with preverbal negation. Hence, we have to state that in none of the cases in (13a) through (13d) do we have clear evidence of transfer, even if similar negation patterns may occur in the respective substrate language.

It is only with Palenquero and Berbice Dutch (and some other creoles not discussed here, e.g. Stolz (1986: 140-142), Schwegler (1996)) that transfer can be assumed, since in these languages we find patterns that go beyond pre-verbal negation, and which at the same time mirror structures we find in the substrate languages. Both Palenquero and Bebice Dutch exhibit sentence-final negation. The status of sentence-final negation in the processability hierarchy is not quite clear, but it seems reasonable to assume that it should be at the same level as sentence-final question particles, which can be assumed to be located at stage 3 (cf. again (9) above). Thus both preverbal negation and sentence-final negation instantiate a rather early stage of SLA. According to the Developmentally Moderated Transfer Hypothesis, these structures can therefore also be transferred already at stage 3, which gives an additional theoretical argument for a transfer analysis. There is additional evidence for transfer at least in Berbice Dutch,

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[10] Note that Berbice Dutch has in fact a number of different negation strategies (Kouwenberg 1994b). Standardly, as given in (14f), negation is expressed by a sentence-final negator *ka(nɛ)*, but there are also negative modal verbs, and a preverbal negator in resultative constructions, all used together with the sentence-final negator. A complete account of the emergence of Berbice Dutch negation is beyond the scope of the present paper.

since the morphemes expressing negation in Berbice Dutch are either directly of Eastern Ijo origin or a combination of Dutch and Eastern Ijo morphemes (Kouwenberg 1994b:264).

In sum, the investigation of negation has shown that creoles primarily feature a structure that corresponds to early developmental stages of interlanguage development, i.e. pre-verbal negation. This is in accordance with the interlanguage hypothesis advocated in this paper. The cross-creole attestation of preverbal negation irrespective of the input languages involved in each particular case can be explained in terms of the limited processing capacities available to the L2 learners at the time of creole emergence. Cases of alleged transfer, such as Palenquero and Berbice Dutch can receive independent psycholinguistic support under the assumptions of the Developmentally Moderated Transfer Hypothesis.

6. Conclusion

In this article I have further explored the interlanguage hypothesis as formulated in Plag (2008) by looking at three types of syntactic construction across creoles, i. e. basic word order, question formation, and clausal negation. I hope to have shown that the interlanguage hypothesis, in combination with insights from Processability Theory can shed new light on important problems that are still not satisfactorily solved in our field. In particular, this approach can reveal that potential cases of transfer may in fact be instantiations of structures that originate under the constraints of limited processing capacities that are universally characteristic of early stages of SLA. This takes the discussion of SLA influence beyond the issue of transfer which dominates this debate. However, the approach taken here can in addition substantiate arguments in favor of transfer by offering independent evidence from processing, along the lines of the Developmentally Moderated Transfer Hypothesis.

In my previous Column I argued on the basis of facts in creole inflectional morphology that the relative simplicity of creole grammars (vis-à-vis their input languages) can be acounted for by their analysis as interlanguages of an early stage. There I showed that the emergence of contextual inflection would necessitate

processing procedures at least at stage 4 of the processability hierarchy. The almost complete lack of contextual inflection in creoles indicates that this stage was generally not reached by the creolizers. The investigation of the syntactic structures in this paper adds fuel to this kind of reasoning. We have found structures that generally did not go beyond stage 3 of the hierarchy, which lends independent evidence to the idea that psycholinguistically motivated universal traits of SLA processes are chiefly responsible for the emergence of many creole structures that are generally considered to be unmarked. The interlanguage hypothesis combined with insights from Processability theory can thus help us to understand better the cross-linguistic similarity of creole structures, and also the provenance of language-particular structures in these varieties.

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