L2 postcards from the edge*

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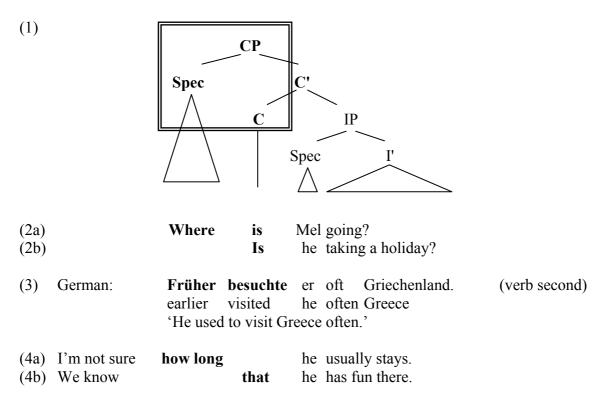
Abstract

Evaluating empirical evidence for and against the presence of CP in (very) early Interlanguage, this paper argues that the initial L2 edge of the clause is CP, configured, moreover, as in the L1 grammar.

Keywords: CP, FT/FA, initial state, Interlanguage, L2 acquisition, transfer, verb second

1. Introduction

The focus of this paper is the characterization of the left edge of the clause, as boxed in (1), in (very) early stages of Interlanguage.



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Findings from crosslinguistic acquisition research have shown us over the years that early Interlanguage (IL) utterances – just like early utterances in developing native language (L1) – typically do not include 'complexities' like in (2), (3) and (4): questions with either *wh*-fronting as in (2a) or subject-auxiliary inversion as in (2a, b); (non-subject-initial) verb second as in (3); and embedded clauses as in (4a, b).

These sentence types are precisely those that unambiguously implicate the highest levels of syntactic projection in the clause, sometimes referred to as "the left periphery" (Rizzi 1997), but what I will abbreviate to "the C-domain". Indeed, the C-domain has received relatively little attention in the literature on nonnative language (L2) acquisition, perhaps because it is the syntactic domain associated with the structure of phenomena that are not among L2ers' earliest utterances¹.

Still, the fact that the sentence types like those in (2)-(4) are typically absent in early IL has commonly been taken as arguing for the *early absence of the structure* needed to represent them. From various theoretical leanings, L2 researchers such as Vainikka & Young-Scholten (e.g. 1994, 1996), Klein & Perdue (e.g. 1997), Hawkins (2001), Bhatt & Hancin-Bhatt (2002) and Håkansson, Pienemann & Sayehli (2002) have all made proposals that amount to claiming that early Interlanguages lack the C-domain.

Contrary to such proposals, this paper argues that the structure generally associated with left-periphery phenomena of the types in (2)-(4) is indeed present in (very) early Interlanguage. To this end, I first review the two most explicit hypotheses articulating that the C-domain is absent in early Interlanguage, and then critically assess the empirical evidence that each offers in support. Next, I discuss (mostly new) L2 research – investigating both a range of phenomena and a variety of source - and target-language pairings – which provides evidence of early IL data which necessarily invoke C-domain syntax. Along the way, I address the issue of the immediate source of the CP structure in early Interlanguage. The conclusion recapitulates the main line of argumentation in the paper and closes by offering a reason for why the earliest instantiation of CP in nonnative language acquisition is configured the way it is.

2. Background: the C-domain, transfer, and the L2 initial state

The question of whether CP is present in (very) early Interlanguage has been linked to the issue of the extent of transfer from the L1 grammar. As we will see presently, this is not in fact logically necessary, but both "CP-is-absent" hypotheses do make this link.

In the mid-90s, the construct of L1 transfer was reconceptualized in terms of the initial state of L2 acquisition, that is, in terms of how much of the L1 grammar constitutes the starting point of L2 development (Hoekstra & Schwartz 1994; Schwartz & Eubank 1996). The motivation for doing so was twofold: first, to make explicit the extent (and timing) of transfer, and second, to 'get a handle' (Schwartz 1997) on how the unfolding of L2 development actually proceeds, because how one conceives of the initial state inextricably determines the possible explanations for development (Schwartz & Eubank 1996; but cf. Hawkins 2001).

For our concerns, the two relevant hypotheses on the L2 initial state are listed in Table 1, the Minimal Trees hypothesis of Vainikka & Young-Scholten (1994, 1996) and

¹ Some of the first empirical L2 investigations into the early presence of the C-domain are Kaplan (1993) for L2 Japanese, and Lakshmanan (1993/94) and Lakshmanan & Selinker (1994) for L2 English. These are not discussed here because of the limited size of the databases. Another reason the Lakshmanan papers – as well as the work by Grondin & White (1996) and Haznedar (1997, 2003) – are not considered is because the participants were young L2 children.

the Structural Minimality hypothesis of Bhatt & Hancin-Bhatt (2002). Although the two are distinct, both argue explicitly that the L1 C-domain is not part of the initial state of nonnative language acquisition.

Table 1. Two hypotheses on the L2 initial state: CP does not transfer from the L1

Hypothesis	Extent of L1 transfer (\rightarrow initial L2 syntactic structure)
Minimal Trees	lexical projections (e.g. VP, NP) and their headedness
(Vainikka & Young-Scholten)	values, but not any functional projections
	(e.g. CP, IP, DP)
Structural Minimality	"all and only properties of [the] L1 associated with the
(Bhatt & Hancin-Bhatt)	IP-system (and below)" (B&H-B 2002: 366, (8))

2.1 Minimal Trees (Vainikka & Young-Scholten)

The Minimal Trees (MT) hypothesis of Vainikka & Young-Scholten (e.g. 1994, 1996) restricts transfer to lexical projections and their headedness values. As transfer of all functional structure is excluded under MT, the L2 initial state of the clause is thus only VP. With respect to there not being a CP, the evidence Vainikka & Young-Scholten offer comes from very early L2 German production data on the part of L1 speakers of Romance, Korean and Turkish, and consists of three types: (a) the *absence* of questions (cf. (2)); (b) the *absence* of (non-subject-initial) verb-second (V2) sentences (cf. (3)); and (c) the *absence* of embedded clauses (cf. (4)), particularly the absence of lexical items associated with C, i.e. complementizers such as *dass* 'that' and *ob* 'if'.

Vainikka & Young-Scholten (e.g. 1994, 1996)

- (5a) L1=Italian, Portuguese, Spanish (SVO, [-V2]); L1 = Korean, Turkish (SOV, [-V2])
- (5b) Target Language=German (SOV, [+V2])
- (5c) natural and elicited production data

2.2 Structural Minimality (Bhatt & Hancin-Bhatt)

As for the Structural Minimality (SM) hypothesis of Bhatt & Hancin-Bhatt (2002), the C-domain is singled out as the only functional layer of the clause not subject to transfer. Specifically, according to SM, the clausal structure of the L2 initial state consists of the L1 IP. The data Bhatt & Hancin-Bhatt offer in support come from their study that explicitly set out to test for CP in the early L2 English of Hindi speakers. They sought to assess the presence of CP by means of two tasks targeting distinct phenomena.

Bhatt & Hancin-Bhatt (2002)

- (6a) L1 = Hindi (SOV, [-wh mvt]); Target Language = English (SVO, [+wh mvt])
- (6b) 2 tasks targeting the C-domain (2 studies, the preliminary one and the main one)
 - i. written question-production task
 - ii. adverbial-construal comprehension task
- (6c) 100+ participants, spanning 4 or 5 levels of English instruction, the first (testable) being elementary

In the written question-production task, the participants were asked to supply the missing questions in short English dialogues. The ways to form questions in Hindi and English differ, as shown in (7):

(7a)	vah kal	hoTal meN kyaa	khaa rahaa thaa	(Hindi)
	he yesterday	hotel in what	eat prog was	
	'What was he eating in the hotel yesterday?'			
(7b)	kyaa usne kha	naa khaayaa?		
	what he for	d ate		

'Did he eat food?' (Bhatt

(Bhatt & Hancin-Bhatt 2002: 354, (3), (4))

First, unlike English, Hindi is a *wh-in-situ* language: in constituent questions, such as (7a), neither the *wh*-phrase nor any auxiliary element (if there is one) moves to the C-level. Second, again unlike English, Hindi yes/no questions, as in (7b), consist of a declarative clause preceded by a question particle (*kyaa* 'what').

The L2 English data were collected in India from over 100 Hindi speakers – from 125 in the preliminary study, across five levels of English instruction, ranging from Grades 6 to 12, and from 101 in the main study, across four levels of English instruction, ranging from Grades 7 to 13. The results essentially show the progression laid out in (8):

Hindi-English development of questions

- (8a) *wh-in-situ* (in the preliminary study)
- (8b) wh-phrases in sentence-initial position
- (8c) Subject-Auxiliary Inversion in yes/no questions
- (8d) target-like *wh*-questions

The developmental pattern in (8) leads Bhatt & Hancin-Bhatt to argue that

knowledge of English CP is initially not available ... [because if] the CP projection were present, then all *wh*-phrases should have moved to Spec-CP, with Aux simultaneously moving to Comp. (B&H-B 2002: 363-64)

The second task concerned adverbial construal. This time, participants were asked first to read a brief narrative in Hindi, in which, for example, Peter made a statement in a car about seeing a dog somewhere else, or Peter made a statement, let us say, in the kitchen about having seen a dog in the car. Presented with an English sentence of one of the types in (9), they were to judge whether, in light of the context, it was true or false.

(9a)	PP-Comp:	Peter said in	the car that	he saw a dog.	(PP-matrix)
(9b)	Comp-PP:	Peter said	that in the car	he saw a dog.	(PP-embedded)
(9c)	no overt Comp:	Peter said	in the car	he saw a dog.	(ambiguous)
			(adapted from Bhatt &	k Hancin-Bhatt	2002: 372 (13))

In (9a), the PP *in the car* precedes the complementizer *that* and so is construed with the (matrix-clause) 'saying'-event, whereas in (9b) the PP follows the complementizer and so is construed with the (embedded-clause) 'seeing'-event. As for (9c), there is no overt complementizer and thus this sentence is ambiguous, i.e. the PP could be construed with the main clause or the embedded clause.

The task comprised 20 items, of which 8 had the PP-Comp order of (9a), 8 had the Comp-PP order of (9b) and 4 had no complementizer (9c). The mean number of correct judgments on the 16 experimental items containing an overt complementizer (i.e. of type (9a) or type (9b)) is given in Table 2.

Group	Mean (SD)	Percentage
Grade 7 (<i>n</i> =25)	7.8 (2.0)	55.7%
Grade 9 (<i>n</i> =25)	8.4 (1.7)	60.0%
Grade 11 (<i>n</i> =23)	11.9 (2.4)	85.0%
Grade 13 (<i>n</i> =28)	13.0 (1.4)	92.9%

*This reproduces the numbers as reported in Bhatt & Hancin-Bhatt, although the reported percentages appear to assume 14, not 16, as the denominator

(adapted from Bhatt & Hancin-Bhatt 2002: 375, Table 8)

Bhatt & Hancin-Bhatt (2002:375) noted that there was a statistically significant difference between Grades 9 and 11, with no significant difference between Grades 7 and 9 or between Grades 11 and 13. On this basis they argue that

learners in the first two levels do not show any covert [sic] evidence of the presence of the C^0/CP projection, as indicated by their close-to-chance performance. If the CP projection were available either via UG or via transfer from L1, then we would expect all our learners to perform uniformly across the grade levels, using this projection from relatively early on. (B&H-B 2002: 375)

In sum, there are two types of evidence that Bhatt & Hancin-Bhatt use to argue that CP is absent in early Interlanguage: (a) *nontarget-like* questions; and (b) *nontarget-like* interpretive consequences associated with the C-domain.

3. Reconsidering the no-CP-in-early-IL evidence encountered so far

What would a hypothesis that does posit the C-domain in (very) early Interlanguage say about the data we have seen so far? As alluded to in the second quote above from Bhatt & Hancin-Bhatt, the early presence of CP could mean one of two things: that it comes (directly) from UG or that it transfers as configured in the L1 grammar. While some of the upcoming arguments against the L2 initial state lacking the C-domain are compatible with either, other conceptual arguments and other empirical counterevidence support only the L1 transfer possibility. This possibility, as in Table 3, is in fact the L2 initial state proposal that Rex Sprouse and I have been advocating for about a decade (e.g. Schwartz & Sprouse 1994, 1996, 2000).

Table 3. Another hypothesis on the L2 initial state: CP is transferred from the L1

Hypothesis	<i>Extent of L1 transfer</i> (\rightarrow <i>initial L2 syntactic structure</i>)
Full Transfer/Full Access	"the entirety of the L1 grammar (excluding the phonetic
(Schwartz & Sprouse)	matrices of lexical/morphological items)" (S&S 1996: 41)

The Full Transfer part of Full Transfer/Full Access (FT/FA) hypothesizes that the whole of the L1 grammar (excluding the phonetic matrices of lexical/morphological items) transfers and thus constitutes the L2 initial state. According to Full Transfer, then, the L2 initial state should not just show evidence of the C-domain but it should

show evidence of the properties of the L1 C-domain².

Given this, let us now consider how Full Transfer/Full Access responds to the empirical evidence presented in support of the idea that the L1 C-domain does not transfer in full. This evidence is summarized in (10) and (11):

Evidence against CP in early IL (Romance-/Korean-/Turkish-German production data)

(10a) *absence* of questions

(10b) absence of (non-subject-initial) V2 sentences

(10c) *absence* of embedded clauses, particularly lexical items associated with C, i.e. complementizers such as *dass* 'that' and *ob* 'if'

(Vainikka & Young-Scholten 1994, 1996)

Evidence against CP in early IL (Hindi-English production and comprehension data)

(11a) *nontarget-like* questions (NB: for lowest L2ers, 73/130 [56.1%] were *wh-in-situ*)

(11b) *nontarget-like* interpretive consequences associated with the C-domain

(Bhatt & Hancin-Bhatt 2002)

One reason to question the type of evidence in (10a) and (10c) is the familiar adage "absence of evidence is not evidence of absence". This is to say, the fact that neither the spontaneous nor elicited L2 production data contained e.g. questions or embedded clauses could well be an artifact of the discourse and/or the task, and not indicative, in principle, of lack of knowledge i.e. lack of the C-domain. Another reason to question (10c) has to do with distinguishing between a syntactic category, e.g. C, and the lexical/morphological material associated with that category e.g. *dass* 'that'. In short, the absence of lexical items associated with C does not entail that the category C itself is absent (Hyams 1994; Schwartz 1998). Lexical items, after all, do have to be learned³.

This point about learning likewise extends, although in a somewhat different fashion, to the evidence of type (10b): absence of V2 utterances. Here parametric differences between the Target Language (TL), on the one hand, and, the L1s, on the other, come into play. Since none of the L1s – Italian, Korean, Portuguese, Spanish and Turkish – is a V2 language, then under Full Transfer one expects the early Interlanguages based on

 $^{^{2}}$ A reviewer asks whether, according to FT/FA, "non-L1 properties are also available in the [L2] initial state", i.e. whether the FA part in addition to the FT part characterizes the L2 initial state. And the answer is "yes, in principle," but since FT constrains the L2 initial state, changes from that state have to have a *cause*, namely input from the Target Language. In effect, then, it is only in subsequent L2 development that one can test directly for UG (i.e. FA) in Interlanguage.

³ A reviewer nonetheless wonders why "closed-class items take so long to be learned". First, it is not the case that they always do. For instance, Klein & Perdue (1997) find that unlike with all other pairings of L1 and Target Language in their large European Science Foundation project on naturalistic adult L2 acquisition

[[]t]he Spanish-speaking learners ... acquiring French are quick to use the formal similarity between markers of subordination in both languages, so that their learner varieties show precocious subordination with **por** [Spanish for 'for'] and (*parce*) *qué* [*sic*, 'because', 'that']. (p.331, fn. 29)

Under such conditions, TL closed-class items map easily – and speedily – to L1 analogues. However, such mapping (or relexification – Lefebvre 1998; Sprouse submitted) may certainly not always be so direct. This could slow down the learning as could, of course, the fact that the elements typically associated with functional heads (like complementizers, in the C-domain) are often, though not always, not perceptually salient.

these L1s to lack V2. This, then, is a case where the parameter value of the L1, call it [-V2] for simplicity's sake, needs to be relinquished and reset to the TL German value, [+V2] (i.e. invoking Full Access). This, too, necessitates some kind of learning or 'trigger', the specifics depending on the analysis of V2 (which I leave to the side here).

This same line of reasoning also undermines the type of evidence in (11a). Recall that questions in Hindi and English differ with respect to *wh*-fronting, again representing a parametric difference; call Hindi [-wh mvt] and English [+wh mvt]. Again, the prediction of Full Transfer in this case is that the earliest Interlanguage will be like Hindi, with *wh-in-situ* questions – which is indeed what was found: of the 130 attempted questions in the lowest (testable) level, 73 (56.1%) had the *wh*-phrase *in situ*⁴. Since the L1 parameter value, [-], has to be reset to the TL value, [+], based on TL input, there's clearly no reason to expect target-like English questions straightaway⁵.

But the problem with (11a) as well as (11b) is in fact more general, since the criterion used in both is *target-like performance*. The fallacy here, as noted in Dekydtspotter, Schwartz, Sprouse & Liljestrand (2005), is that knowledge of CP for these Hindi acquirers of English does not necessarily entail the *English-particular* parameter settings for main-clause questions, i.e. the fronting of auxiliaries and *wh*-phrases to, respectively, C and Spec,CP. Subject-Auxiliary Inversion (SAI) on its own in yes/no questions (cf. (8c)) could be taken as evidence of the C-domain, as could *wh*-fronting onits own, i.e. without the concomitant SAI, in constituent questions (cf. (8b)). The latter represents a possibility for main-clause questions in French: when *wh*-phrases move to Spec,CP, the verb can, as in (12a), but need not, as in (12b), raise to C^6 .

(12a) [CP Où [C' vas-tu]]? (French: [IV+I] complex in C) where go you 'Where are you going?'

⁴ Whether these questions are evidence for the presence of the C-domain depends on one's theory of question interpretation at LF, a matter I will not pursue here (but see also fn. 5). As for the 43.9% of their questions that did exhibit *wh*-fronting, these are clear signs of development beyond the L2 initial state, in response to TL input. (In these questions, according to Bhatt & Hancin-Bhatt, L2ers "interpret *wh*-phrases not as operators, but rather as quantifiers which Quantifier-Raise [adjoining to IP at LF], and this quantifier interpretation of *wh*-phrases is a result of transfer from Hindi" (p.367)). For our concerns, of principal import is that even after about 1.5 years of "formal English language study" (p.357), these L2ers' *wh*-questions still displayed considerable influence from their L1 grammar.

⁵ This characterization of [±wh mvt] is no doubt too simple, as Hindi is a (type of) *wh*-scope marking language (e.g. Dayal 1993). If Hindi separates the wh-feature from the Q-feature and English fuses them in single lexical items (leading to *wh*-movement), then the task of Hindi speakers acquiring English is to relinquish the L1 system (separation) and learn the TL system (fusion). In this regard, a reviewer suggests that the *wh-in-situ* data from the lowest Hindi L2ers indicate, in line with FT, that they first misanalyze English *what* as a scope marker (see *kyaa* in (7b) – i.e. with a Q-feature but no wh-feature); otherwise, according to this reviewer, "we should expect L2ers to move the *wh*-phrase to the front on the grounds of its quantificational, +wh status....". While I am not unsympathetic to this idea, we still have to reckon with the fact that – even if *kyaa* in Hindi can be a scope marker – *kyaa* clearly need not occur in C in (simple) *wh*-questions (see (7a)), which is contrary to what one would expect were it exclusively a scope marker. For an extensive investigation of *wh*-scope marking in the L2 English of speakers of German, which does have (optional) *wh*-scope marking, and speakers of Japanese, which does not, see Schulz (in progress).

SAI in French is possible only with pronominal subjects.

(12b) [CP Où [C'[IP tu vas]]]?(French: [IV+I] complex not in C) where you go 'Where are you going?' (Rizzi & Roberts 1989)

Target-like performance is again the criterion used in the adverbial construal task, and so (11b) is in principle subject to the criticism offered against (11a). Unfortunately, the way the data are presented in Bhatt & Hancin-Bhatt (2002) makes it impossible to determine if there is in fact *nontarget-like* evidence for the existence of CP. The participants' responses are categorized only as correct or incorrect; crucially missing in the latter is the further separation of 'wrong PP-matrix' interpretations from 'wrong PP-embedded' interpretations (see (9)). Unable to attempt a reanalysis of these data, Dekydtspotter et al. (2005) instead report on a very similar study by Garcia (1998).

3.1 An early interpretive asymmetry implicating (the transfer of) CP: Garcia (1998)

Garcia (1998) also investigated English L2ers' construal of interclausal adverbials. The design employed in Garcia's study was an oral picture-selection task, consisting of test sentences such as the one in (13):

(13) Charles told Anne in the winter that he played tennis.

So, for example, for (13) there was one picture in which the telling took place in the snow and cold, whereas the tennis playing occurred in a snow-free environment. There was a second picture in which the telling took place in a snow-free environment, whereas the tennis playing being spoken about was in the snow and cold. A third picture, with no clear relation between the characters, represented the "don't know" option, an option that was virtually never taken.

The stimulus sentences in Garcia's experiment were presented as tape recordings of a native speaker of (British) English. In the recordings, pauses sandwiched both the PP adverbial and the complementizer, as, for example, in (14) for the test item in (13):

(14) Charles told Anne [PAUSE] in the winter [PAUSE] that [PAUSE] he played tennis.

The recordings also offered maximally neutral intonation contours. After hearing a given sentence twice, the participants were asked to choose one of the three pictures. This aspect of the presentation of the stimulus sentences is clearly preferable to the silent reading format employed by Bhatt & Hancin-Bhatt, because even in silent reading a prosodic constituency is imposed and influences the eventual interpretation (Fodor 2002). In their study, we do not know what intonational contours the L2ers imposed in their silent reading. This potential confound, however, does not arise in Garcia's study.

In all, there were 48 test items, comprising 5 sentence types, summarized in (15):

Sentence types tested in Garcia (1998)

benience types tested	
(15a) PP-Comp :	Charles told Anne in the winter that he played tennis.
	$(k = 12:9 \ that; 3 \ if)$
(15b) Comp-PP :	Charles told Anne that in the winter he played tennis.
	$(k = 12:9 \ that; 3 \ if)$
(15c) no overt Comp	: Charles told Anne in the winter he played tennis. $(k = 12)$
(15d) PP-initial:	In the winter Charles told Anne that he played tennis. $(k = 6)$
(15e) PP-final:	Charles told Anne that he played tennis in the winter. $(k = 6)$

The sentence types in (15a-c) are similar to those used in the Bhatt & Hancin-Bhatt study. An adverbial of time or place either preceded the complementizer, as in (15a), or followed the complementizer, as in (15b), or occurred with no complementizer, as in (15c). The types in (15d-e), with the PP in sentence-initial or sentence-final position, were intended as distractors (and so will not be discussed here).

Garcia's study included 10 Arabic speakers and 8 Chinese speakers with quite rudimentary English proficiency⁷ and 4 native English speakers served as controls.

Test participants in Garcia (1998)

(16a) L1 Arabic (n = 10, cloze-score range of 15.8%-34.2%)

(16b) L1 Chinese (n = 8, cloze-score range of 15.8%-34.2%)

(16c) Native speakers (n = 4)

Although Dekydtspotter et al. (2005) relied on the data reported by Garcia, they diverged from her in the way they examined them. I summarize their analysis here.

Recall, first, that Garcia included stimulus sentences without the complementizer, like in (15c), in which the construal of the adverbial PP was thus genuinely ambiguous. These results are given in Table 4.

Table 4. Mean	preference for PI	construal	on items with	no overt Con	$p(k=12)^*$
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Group	Main-clause construal	Embedded-clause construal
Native English $(n = 4)$	47.9%	52.1%
L1 Arabic $(n = 10)$	34.5%	65.5%
L1 Chinese $(n = 8)$	36.2%	63.8%

• e.g. Charles told Anne in the winter he played tennis.

(adapted from Garcia 1998: 39, Table 4)

Table 4 reveals an important distinction in the way the English native speakers vs the early L2ers construe interclausal PPs when there is no overt complementizer: in the absence of any additional favoring factors such as intonation or context, native speakers do not exhibit a clear preference for either main-clause or embedded-clause construal, whereas both of the early L2 groups exhibit a strong preference for the *embedded-clause* construal (last column). It is essential to consider this preference when interpreting the results on PP-Comp and Comp-PP sentences, because it shows what we would expect the results to be if no other factors influence the choice of picture.

Table 5 provides the mean percentage of acceptance of *embedded-clause construal* of the PP on the three experimental types: no overt Comp, PP-Comp and Comp-PP.

['] For the phenomena at issue, Arabic apparently operates much like English: complementizers (which can be optional) mark the edge of possible adverbial construal. Chinese, on the other hand, does not have complementizers, and adverbials always construe with material to their right.

Group	no overt Comp (k=12) ^a	<i>PP-Comp</i> (k=12) ^b	Comp-PP (k=12) ^c
Native English $(n = 4)$	52.1%	12.5%	98.0%
L1 Arabic $(n = 10)$	65.5%	33.3%	79.2%
L1 Chinese $(n = 8)$	63.8%	50.0%	81.2%

 Table 5. Mean response of embedded-clause construal

^a e.g. Charles told Anne in the winter he played tennis.

^b e.g. Charles told Anne in the winter that he played tennis.

^c e.g. Charles told Anne that in the winter he played tennis.

(based on Garcia 1998: 39, Table 4; x, Appendix 5)

If it were the case that the relative order of the PP and the complementizer had no influence on respondents' construal of the PP, then we should expect the columns labeled "PP-Comp" and "Comp-PP" to be statistically indistinguishable for any given group, and we might well expect those rates to approximate to the rates in the column labeled "no overt Comp". Thus, on Bhatt & Hancin-Bhatt's hypothesis that early IL lacks CP, one would expect only the native speakers' "PP-Comp" and "Comp-PP" rates to show a significant departure from the "no overt Comp" rate, but no such significant differences in the rates of the three sentence types on the part of the early L2ers. But this is manifestly not the case, since all three groups exhibit a strong asymmetry: the construal of PPs with the embedded clause is much more common with Comp-PP sentences (last column) than it is with PP-Comp sentences.

Whatever is responsible for the L2ers' general preference for the embedded-clause construal of the PP – and Dekydtspotter et al. argue that it is a processing effect – the findings in Table 5 have shown us that this preference is significantly inhibited when L2ers are presented with PP-Comp sentences and is significantly enhanced when L2ers are presented with Comp-PP sentences. It is difficult to see what could be guiding this behavior, apart from the complementizer being taken – by all three groups – as the marker of the left-periphery of the embedded clause.

(17) <u>Reason to question the type of evidence in (11b) (Dekydtspotter et al. 2005)</u>

Evidence from Garcia (1998) of *asymmetric* (*nontarget-like*) interpretive consequences associated with the C-domain in very early Interlanguage (i.e. significantly more incorrect embedded-clause PP construal on PP-Comp than incorrect matrix-clause PP construal on Comp-PP)

The take-home message is this: the L2ers are differentiating between PP-Comp and Comp-PP sentences. Dekydtspotter et al. take this to suggest that, despite the *nontarget-like* performance, the L2ers' early Interlanguage does indeed project an embedded CP, for if there weren't one, there would be no reason for them to perform *asymmetrically* on the two sentence types⁸.

[°] Dekydtspotter & Liljestrand (in press) have since found, in English-French Interlanguage, the same asymmetry, using locational PP adverbials (e.g. *dans la maison* 'in the house') in both a forced interpretation task and an online self-paced reading task, as have Bullock et al. (2006), using deictic temporal adverbials (e.g. *yesterday*), in Japanese-English Interlanguage as well as native English, in a tense-meaning (mis)match acceptability judgment task, although, interestingly, not in their online self-paced reading task.

3.2 Summary

So far, then, the L2 data that purportedly argue against (the transfer of) CP seem less than convincing. First, independent discourse-anchored reasons can explain why certain phenomena that implicate the C-domain do not occur in L2 production. Second, "absence of evidence" for the C-domain is not necessarily "evidence of absence" of the C-domain. Third, it is incorrect to equate the absence of lexical items that fill C with the absence of the syntactic category C itself. Fourth, a hypothesis that claims that L2ers initially adhere to their L1 parameter value which does *not* (overtly) implicate the C-domain. And fifth, it is misguided to adopt the criterion of target-like performance on phenomena implicating the C-domain, since (at least in some cases) nontarget-like performance can in fact provide evidence for its early presence. In a nutshell, the L2 data considered thus far are unproblematic for a hypothesis that attributes CP to the L2 initial state, at least under a Full Transfer hypothesis.

4. More (seemingly) problematic: Håkansson, Pienemann & Sayehli (2002)

Interestingly, though, there are other L2 data that on the face of it directly contest Full Transfer in the C-domain. These data concern the L2 acquisition of a V2 language by speakers whose L1 is also V2. Clearly, under Full Transfer the presence of V2 in the L1 should lead to speedy – indeed immediate – convergence on V2 in the TL – but this is not what was found.

The study is by Håkansson, Pienemann & Sayehli (2002), who look at the L2 acquisition of German by native Swedish speakers. Swedish is an SVO language, unlike German, which is (in the relevant sense) SOV, but both are Germanic V2 languages.

An elicited-narration task was used to collect L2 German production data. A native German speaker interviewed the 20 L2 students, evenly divided between first-year German (age 13) and second-year German (age 14).

Håkansson, Pienemann & Sayehli (2002)

- (18a) L1 = Swedish (SVO, [+V2]); Target Language = German (SOV, [+V2])
- (18b) production data from an elicited-narration task
- (18c) 20 participants: 10 in 1st-year German (age 13); 10 in 2nd-year German (age 14)

Håkansson et al. restrict the database to declarative main clauses that contain at least a subject and a verb (p. 256) and report only the incidence of V2 in utterances that have a sentence-initial adverbial. Although they provide breakdowns by individuals, so striking are the results that no information is lost grouping them by level, as in Table 6:

Group	Number of declarative main clauses with a subject and verb	Incidence of V2 out of all adverb-initial utterances*
1st-year German $(n = 10)$	155	0/12 (0%)
2nd-year German ($n = 10$)	303	10/37 (27.0%)

 Table 6. V2 in Swedish speakers' adverb-initial German

* Only 4 produce adverb-initial V2 at all, and only 2 do so consistently (2/2 and 6/8).

(adapted from Håkansson et al. 2002: 256-57, Tables 2 & 3)

In the first-year group, only 12 adverb-initial utterances are produced (representing 6 participants), and not a single one is V2, i.e. they produce 'V3' (*AdvSV...) instead. The second-year group is only slightly more target-like: out of the 37 adverb-initial utterances (representing 8 participants), only 27% are V2.

Meager though these data are, they still pose a challenge to Full Transfer. The good news is that the recent work of Ute Bohnacker superbly rises to this challenge.

5. Indisputable evidence for the transfer of the C-domain

5.1 Bohnacker (2005, 2006)

Bohnacker has carried out a series of studies on the acquisition of German by Swedish speakers as well as one on the acquisition of Swedish by German speakers (Bohnacker 2003, 2005, 2006). Although she confronts several generally accepted 'myths' in the L2 acquisition literature, of interest to us is her research on the L2 acquisition of German by Swedish absolute beginners.

As Bohnacker rightly observes, there is a serious potential confound in the Håkansson et al. study, because all of their participants

[had] had at least 3 years of English before their first exposure to German, and 4-6 years of English by the time their German was tested. Thus German was their third language, and syntactic properties of English (a non-V2 SVO language) may have transferred to their L3 German. (Bohnacker 2006: 447)

To determine whether English is the source of the V2 problem, Bohnacker therefore carefully compares German production data from two sets of Swedish speakers: for 3 of them, German is the first L2; and for the other 3, English is the first L2 and German the second i.e. their L3. Thus the latter group's language profile closely corresponds to the language profile of the participants in the Håkansson et al. study.

Data were collected on two occasions, first after a mere 4 months of German classes and then 5 months later. For both, Bohnacker individually recorded the participants talking about what they do or would like to do in their spare time. At the first session, 2 participants – one who knew English and one who didn't – were unable to carry out the task because their German was so minimal, and the 4 others each spoke for about 15 minutes. A few days later, Bohnacker recorded 2 of these same 4 participants – again, one who knew English and one who didn't – during separate two-hour, one-on-one interactions with a monolingual German. Finally, at the second monologue session after 9 months of German, data were collected from each of the 6 participants, since this time all were able to complete the task, speaking on average for about 30 minutes.

Bohnacker (2005, 2006)

(19a) L1 = Swedish (SVO, [+V2]); Target Language = German (SOV, [+V2])

- (19b) 6 ab initio participants
 - i. 3 who knew no other language (i.e. German = L2)
 - ii. 3 who knew English (i.e. German = L3)
- (19c) production data at two data points
 - i. after 4 months of exposure
 - 1. 15-minute monologues: German = L2 for 2; German = L3 for 2
 - 2. 2 hours with monolingual German: German = L2 for 1; German = L3 for 1
 - ii. after 9 months of exposure: 30-minute monologues from all 6 participants

As might be expected, Bohnacker's data are much more extensive than Håkansson et al.'s. And while Bohnacker provides very detailed quantitative and qualitative analyses of the data, the main finding remains crystal-clear in the collapsed data, given in Table 7:

Exp	oosure	V2a	'V3'	V2 instead of 'V3' b
		93/315	0	93/93
SHTNOM	German = L2	(29.5%)	(0%)	(100%)
NO	German = L3	54/302	46/302	54/100
4 M	(English = L2)	(17.9%)	(15.2%)	(54.0%)
		158/518	1/24	158/159
THS	German = L2	(30.5%)	(0.8%)	(99.4%)
MON	German = L3	304/439	59/439	304/363
6 м	(English = L2)	(17.3%)	(13.4%)	(83.8%)

 Table 7. Word order in the L2 vs L3 German of L1 Swedish speakers

^a V2=non-subject-initial V2

b This is the incidence of (non-subject-initial) V2 out of all opportunities for (non-subject-initial) V2.

(adapted from Bohnacker 2006: 463, Table 3)

These data are robust and unequivocal: when the initial constituent of the utterance is a non-subject (last column), Swedish speakers who *do* know English allow both V2 and 'V3' from the very start (about 50% of the time), whereas Swedish speakers who do *not* know English immediately converge on the V2 property of German (in all 93 instances, i.e. 100% of the time)⁹. The obvious conclusion that Bohnacker comes to is that Swedish V2 transfers in the L2 group, and Swedish V2 and English 'V3' both transfer in the L3 group. These findings are thus a strong confirmation that the initial state of nonnative language acquisition includes the transfer of the configuration(s) of CP.

Note that Bohnacker's results are important not only because they overturn the Håkansson et al. no-transfer conclusion, but also because no other study on the L2 development of German/Dutch verb placement – where crucially, the L1s were *not* V2 – has found immediate convergence on V2 (e.g. Clahsen & Pienemann 1981; Jansen, Lalleman & Muysken 1981; duPlessis, Solin, Travis & White 1987; Jordens 1988; Jagtman & Bongaerts 1994; Meisel, Schwartz & Sprouse 1994; Vainikka & Young-Scholten 1994; Beck 1998). In other words, only when the L1 is V2 do we see immediate L2 convergence on the V2 property of the TL, in line with Full Transfer.

So, in this first clear case of CP transfer, the L1 and the TL are both V2. Next we look at a pair of studies that compares transfer at the CP level in the acquisition of V2 when in one case the L1 is non-V2 and in the other case the L1 is V2. And the final case of C-domain transfer we will consider is where the L1 is V2 but the TL is not.

Note that contrary to the participants in the Håkansson et al. study (see Table 6), Bohnacker's corresponding L3 participants are not limited to 'V3' utterances: their V2 rate, calculated out of all utterances that begin with a non-subject (last column), is 54% at 4 months and 83.8% at 9 months.

V2 in L1?	V2 in TL?	Study	
+ (Swedish)	+ (German)	Bohnacker (2005, 2006)	
(English) + (Afrikaans)	+ (German)	Grüter (2004); Grüter & Conradie (2004	
+ (Dutch)	(French)	Hulk (1991)	

Table 8. L1-TL [±] V2 constellations for testing transfer at the C-domain

5.2 Grüter (2004); Grüter & Conradie (2004)

Grüter (2004) in fact set out to test – specifically targeting CP – whether the full clause structure of English speakers transfers in their L2 acquisition of German. In Grüter & Conradie (2004), the same German experiment was run with L1 speakers of Afrikaans, a language which, in the relevant respects, is unlike English but like German (see below).

The data were collected by means of a very clever picture-interpretation task. It exploits properties of German morphosyntax (morphological syncretism, [+V2] and OV) that together can sometimes lead to *wh*-questions being ambiguous as either subject questions or object questions, as exemplified in (20):

(20a) Was beisst die Katze?

what bites the cat

'What is biting the cat?' \leftarrow [CP Was_i [C' beisst [IP t_i [VP die Katze]]]]?

'What is the cat biting?' $\leftarrow [_{CP} Was_i [_{C'} beisst [_{IP} die Katze [_{VP} t_i]]]]?$

(20b) Was hat die Katze gebissen?

what has the cat bitten

'What has the cat bitten?' \leftarrow [CP Was_i [C' hat [IP die Katze [VP t_i gebissen]]]]? 'What has bitten the cat?' \leftarrow [CP Was_i [C' hat [IP t_i [VP die Katze gebissen]]]]?

(adapted from Grüter 2004: 7-8)

Note that in English the analogue of neither (20a) nor (20b) is ambiguous. With the simplex verb in the present tense, *What bites the cat?* can only be a subject question, and with the periphrastic present perfect, *What has the cat bitten?* can only be an object question. By contrast, since Afrikaans is like German in being both SOV and V2 (and it moreover lacks overt case on non-pronominal DPs), the Afrikaans analogues of both (20a) and (20b) are, like German, ambiguous.

Grüter (2004); Grüter & Conradie (2004)

- (21a) L1 = English (SVO, [-V2]); L1 = Afrikaans (SOV, [+V2])
- (21b) Target Language = German (SOV, [+V2])
- (21c) picture-comprehension task (including 10 items like (20a) and 10 items like (20b))
- (21d) participants: 34 complete beginners (~30 hours of German instruction), whose L1 = English for 17 and L1 = Afrikaans for 17; 15 native controls

In the first study, Grüter (2004) hypothesized that if L2ers initially rely on their L1 grammar, then native English speakers will initially be prone to interpret, on the one hand, German present-tense questions like (20a) as only subject questions, but, on the other, German present-perfect questions like (20b) as only object questions. By the same logic, Grüter & Conradie (2004) in the second study hypothesized that, *ceteris paribus*, native Afrikaans speakers would initially pattern like native German speakers, i.e. see the ambiguity and answer accordingly. From a slightly different perspective, the prediction under Full Transfer is that for the two types of German questions (20a, b), the English-speaking L2ers will have two distinct patterns (viz. type (20a) as only a subject question; type (20b) as only an object question), but the Afrikaans-speaking L2ers and the natives will each have only one pattern.

Seventeen English-speaking students of German, 17 Afrikaans-speaking students of German and 15 native German speakers took part in the experiment. The L2ers were extremely low level, having had, approximately, a mere 30 hours of German instruction prior to the study (English L2ers at 3 hours/week for 8-10 weeks; Afrikaans L2ers at 4 hours/week for 6-8 weeks). The participants were asked to circle the answer or answers to questions given in the context of pictures. In addition to distractor questions, there were 10 tokens of each of the types in (20a) and (20b), and each one could be truthfully answered in two ways: as A doing something to B or as B doing something C.

The results from all three groups in both conditions, the simple-present condition and the present-perfect condition, are given in Table 9:

		Subject Q ^a	Object Q ^b	Both	Neither
PRESENT =10)	Native German-speaking controls (n = 15)	16.0%	43.3%	40.7%	0%
	English-speaking L2ers of German (n = 17)	71.2%	28.8%	0%	0%
(n =	Afrikaans-speaking L2ers of German $(n = 17)$	32.4%	60.0%	7.6%	0%
ESENT PERFE (n=10)	Native German-speaking controls (n=15)	7.3%	47.3%	45.3%	0%
	English-speaking L2ers of German $(n = 17)$	2.4%	97.1%	0%	0.6%
	Afrikaans-speaking L2ers of German $(n = 17)$	20.0%	67.6%	12.4%	0%

Table 9. Interpretation of (ambiguous) German wh-questions

a e.g. Was beisst die Katze? (interpreted as 'What is biting the cat?' and not 'What is the cat biting?')
b e.g. Was hat die Katze gebissen? (interpreted as 'What did the cat bite?'' and not 'What bit the cat?') (adapted from Grüter & Conradie 2004: 47-49, Figures 2-4)

In Table 9 we see that even the native German speakers did not always see the ambiguity of the questions, giving a response of "both" at the rates of only 40.7% and 45.3% in, respectively, the simple-present and present-perfect conditions (where the other favored interpretation was as an object question, at 43.3% for the simple present and at 47.3% for the present perfect). For whatever reason this happened¹⁰, the real point is that the natives did **not** treat the two conditions differently. As for the L2ers, we

¹⁰ Grüter & Conradie (p. 30) make the reasonable suggestion that *was* 'what', being underspecified for [animacy], biases towards a nonagent (e.g. a theme), which is typically not the subject.

see that the Afrikaans speakers likewise treat the two conditions similarly, in each case preferring the *object-question* interpretation: i.e. at the rates of 60% and 67.6% in, respectively, the simple-present and present-perfect conditions. Crucially, however, the patterns of the English L2ers differ both from the natives and from the Afrikaans L2ers. Only the English L2ers treat the two types of questions as utterly distinct: simple-present *wh*-questions are interpreted as *subject* questions at a rate of 71.2%; present-perfect *wh*-questions are interpreted as *object* questions at a rate of 97.1%.

As Grüter & Conradie rightly conclude, these L2 German findings, then, are solid evidence of the L1 transfer of the whole clause, including, notably, the C-domain¹¹.

Grüter (2004); Grüter & Conradie (2004): Evidence for transfer of the full C-domain

- (22a) natives treat the simple-present and present-perfect conditions similarly
- (22b) the Afrikaans L2ers of Germans also treat the two conditions similarly
- (22c) only the English L2ers of German treat the two conditions as utterly distinct, interpreting simple-present German *wh*-questions as *subject* questions (71.2%) and present-perfect German *wh*-questions as *object* questions (97.1%)

5.3 Hulk (1991)

The last study we will consider is that of Hulk (1991), which investigated the L2 acquisition of French by native Dutch speakers. Dutch is an SOV, [+V2] language and French is an SVO, [-V2] language.

Hulk devised a 40-item acceptability-judgment task in French manipulating these two properties, i.e. [+V2] vs [-V2] and [OV] vs [VO]. The test sentences thus consisted of both possible and impossible word orders in both Dutch and French. A total of 131 Dutch students of French took part in the study, divided into four groups. Here we concentrate on the 26 beginners in first level high-school French, since they had "just started learning French" (Hulk 1991: 21) and our interest is the initial L2 representation of the C-domain. Specifically, we want to know whether these beginners initially adopt the [+V2] parameter value of Dutch in their early Interlanguage French.

Structural Minimality and Afrikaans L2ers are added in Grüter & Conradie. The latter spells out why "the predictions of [SM] are precisely the same as those of [MT] ..." (p. 20). Thus for Afrikaans L2ers

¹¹ Grüter (2004) frames the research in terms of Full Transfer vs Minimal Trees, whose predictions

converge in the case of the present tense: both accounts predict English-speaking learners of German at the initial state to interpret ambiguous constituent *wh*-questions as subject questions only. For questions in the perfect tense, however, predictions differ. While [FT] predicts an object question interpretation only, [MT] makes no principled predictions since the relevant string cannot be accommodated within the syntactic representations available to learners at this stage. If any bias can be expected, it would have to be based on non-syntactic strategies for interpretation.... (Grüter 2004: 11-12)

[[]i]n the present tense, ... the proposed [IP] grammar [of SM] simply cannot accommodate a post-verbal argument. Thus the prediction of [SM] for the Afrikaans learners in the present tense condition is the same as [that of MT], namely that the learners will be guessing or employ an interpretive strategy based on non-syntactic principles. ... In the perfect tense condition, on the other hand, the string can be accommodated within an IP-only tree [under SM as well as within a VP-only tree under MT – BDS].... (Grüter & Conradie 2004: 18).

Hulk (1991) (23a) L1 = Dutch (SOV, [+V2]); Target Language = French (SVO, [-V2]) (23b) 40-item (written) acceptability judgment task (23a) participants: 131 students of French, 26 of whom were beginners

And the answer is that indeed they do, as summarized in Table 10. Comparing the first two rows to all others, we see that only when the word order is possible in Dutch, i.e. V2 plus OV, do these beginning L2ers robustly accept the French sentences – and in fact they do so at the very high rate of 92%. In short, just as with the nonnative results in sections 5.1 and 5.2, Hulk's data thus argue that the C-domain transfers in full.

Sentence pattern	Sentence type	Possible in Dutch?	Acceptance rate
Adv V S O	[+V2], [OV/VO]	yes	92%
Adv Aux S O V	[+V2], [OV]	yes	92%
Adv Aux S V O	[+V2], [VO]	no	38%
Adv S V O	[-V2], [VO]	no	38%
Adv S Aux V O	[-V2], [VO]	no	19%
Adv S Aux O V	[-V2], [OV]	no	30%

Table 10. Beginning Dutch L2ers' acceptance of (adverb-initial) French V2 vs V3

(based on Hulk 1991: 24)

6. Conclusion: The initial L2 edge

This paper examined a variety of L2 data in which the phenomena at issue implicate, at least in the L1s and/or the TLs, the highest syntactic projection of the clause, the CP-layer. Interlanguage evidence that had been claimed to argue for the initial absence of CP or against the initial L1 instantiation of CP was found wanting, whereas the evidence reviewed here – in the work by Bohnacker, Grüter, Grüter & Conradie and Hulk – for the presence of CP in (very) early Interlanguage is, in my view, compelling. The data from these latter studies argue for the conclusion that the initial L2 syntactic edge is indeed the C-domain, which, moreover, is initially configured as in the L1 grammar.

One might well ask *why* the L1 configuration of CP, or any of the L1 (including the lexicon) for that matter, should transfer. One possible answer, from the perspective of the mind as it embarks on L2 acquisition, is that the language-acquiring function makes use of what already works for language as it attempts to analyze TL input; and what already works for language is one (or more) particular instantiation of UG.

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