

BEYOND ACCURACY: MORPHOLOGICAL STABILITY AND DISTRIBUTIONAL DEVELOPMENT IN ADVANCED L2 ENGLISH

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Abstract: This study investigates whether advanced development in the use of the English verb *be* is more effectively captured through distributional behaviour than through morphological accuracy alone. Accuracy-based approaches become less informative at advanced proficiency levels, where error rates are already low and further reductions provide little insight into ongoing change. Drawing on learner corpus data from the Open Cambridge Learner Corpus (Uncoded), the study examines the distribution and morphological realisation of *be* across B2, C1, and C2 learner English through a two-layer corpus-based design, with Layer 1 analysing distributional patterns across structural environments and Layer 2 establishing a morphological baseline through manual coding. The results reveal a modest dissociation between the two dimensions: morphological accuracy is effectively stable by B2, while distributional patterns continue to shift across the proficiency range. Redistribution is concentrated between B2 and C1, with C2 reflecting consolidation rather than further reorganisation. The pattern is more compatible with a sequential relationship between the two dimensions than with parallel development, suggesting that morphological stabilisation may function as a prior condition for the distributional restructuring that follows. The findings suggest that in high-frequency grammatical systems, the site of advanced development shifts from inflectional accuracy to the distribution of forms across structural environments, and that distributional analysis may provide a more sensitive account of that development than accuracy-based approaches alone.

Keywords: L2 English; morphological accuracy; distributional development; English verb *be*; learner corpus

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Beyond Accuracy: Morphological Stability and Distributional Development in Advanced L2 English

1. Introduction

Morphological accuracy has traditionally been treated as a key indicator of grammatical development in second language acquisition (SLA). At advanced levels its usefulness becomes limited: error rates are already low, and further reductions offer little insight into ongoing change. This creates a methodological problem. If development continues beyond intermediate proficiency, as accounts of stabilisation and feature reassembly suggest (Lardiere, 1998a, 1998b; Ortega, 2013), it must be detectable through something other than accuracy alone, and the field currently lacks a systematic account of what that something is for high-frequency grammatical systems.

This study proposes distributional behaviour as a more informative lens at advanced proficiency. Prior corpus-based work on *be* has either aggregated across multiple verbs, obscuring dynamics specific to individual lexical items, or examined learners below the advanced proficiency range considered here. The present study instead isolates a single high-frequency, multifunctional verb across its structural environments, paired with an independent morphological baseline. The central claim is that morphological accuracy and the deployment of forms across structural environments are dissociable dimensions of grammatical knowledge that stabilise at different rates. The English verb *be* is the test case: it is the most frequent verb in English, carries a suppletive paradigm learners must acquire alongside correct deployment, and operates across copular, progressive, passive, and modal environments that differ systematically in grammatical complexity and processing demands. These properties make it possible to test the dissociation within a single verb across environments where the conditions for stabilisation are not uniform.

The analysis addresses two linked questions: whether the proportional use of *be* across structural environments varies systematically across B2, C1, and C2, and whether

finite forms of *be* show continued development in morphological accuracy across the same range. The two-layer corpus-based design handles these separately, with Layer 1 capturing distributional variation and Layer 2 establishing a morphological baseline against which those patterns can be interpreted.

2. Review of literature

This section situates the present study within the theoretical and empirical literature on the acquisition of the English verb *be* in L2 English, with particular attention to the relationship between morphological accuracy and distributional behaviour. A central contention running through the review is that the field has developed increasingly sophisticated theoretical tools for thinking about advanced grammatical development, but that empirical studies have not yet fully explored them: research on *be* has mostly concentrated on accuracy-based measures, while corpus-based distributional work has operated at a level of aggregation that obscures the internal dynamics of individual grammatical systems. It is at this intersection that the present study is positioned.

2.1 Morphology and advanced development

Much SLA research has operationalised development in terms of morphological accuracy, typically measured as the correct supply of forms in obligatory contexts. Originating in morpheme order studies (Brown, 1973; Dulay & Burt, 1974), the approach has remained influential in learner corpus research, where Hawkins and BATTERY (2010) conceptualise development through the emergence of grammatical features, reductions in error frequency, and movement towards more target-like usage. While the approach provides a systematically applicable metric, it privileges surface correctness and offers limited insight into how forms are deployed across contexts.

Generativist accounts complicate this picture considerably. Prévost and White (2000), examining tense and agreement morphology in L2 French and English, argue that variable morphological marking reflects not deficits in underlying grammatical knowledge but difficulties in consistently mapping abstract representations onto

surface forms, a position they term the Missing Surface Inflection Hypothesis (MSIH). Lardiere (1998a, 1998b) presents a longitudinal case study of Patty, a near-native speaker of English with a Mandarin and Indonesian background, tracked over an eight-year period. Across the two studies, Lardiere examines whether persistent variability in tense and agreement marking reflects deficits in underlying grammatical knowledge or a dissociation between syntactic competence and morphological realisation. Despite near-native syntactic behaviour, Patty showed persistently variable surface morphology throughout the observation period. Lardiere argues that this pattern is not evidence of incomplete acquisition but of a stable divergence between intact grammatical representations and their inconsistent mapping onto surface forms, a finding that directly motivates the present study's separation of morphological accuracy from distributional behaviour.

Slabakova (2008) argues, in the Bottleneck Hypothesis, that inflectional morphology constitutes a primary locus of difficulty in L2 acquisition. This has a converse implication for the present study: if morphology is where acquisition is hardest, its apparent stabilisation need not indicate that the surrounding grammatical system has stabilised alongside it. Learners may demonstrate near-ceiling morphological accuracy on a form while still undergoing meaningful development in how that form is distributed across constructions.

Research on advanced L2 development has increasingly distinguished fossilisation from stabilisation: where fossilisation implies long-term cessation of development, stabilisation refers to a plateau in certain domains alongside continued change in others (Han, 2004; Ortega, 2013). The distinction between fossilisation and stabilisation predicts that morphological accuracy and distributional behaviour may stabilise at different rates. Hopp (2010) compared near-native speakers of German-origin English and English-origin German against native speaker controls on grammaticality judgement and self-paced reading tasks, finding that surface accuracy and processing behaviour remained dissociable even at the highest proficiency levels. Some near-native speakers showed native-like inflectional performance offline while still exhibiting processing asymmetries online. Although this dissociation operates at the level of processing rather than distributional deployment, the broader principle is directly relevant: near-ceiling morphological accuracy need not preclude ongoing

differences in how forms are handled across grammatical contexts.

Lardiere (2009) develops the findings of the earlier case study into a broader theoretical framework, proposing that advanced development involves the reorganisation of grammatical feature bundles across constructions rather than the progressive accumulation of new forms. On this account, learners at advanced proficiency are not simply acquiring what they lack but reconfiguring how existing grammatical knowledge is mapped onto structural environments, a process that surface accuracy measures are not designed to detect. This predicts that for a high-frequency and multifunctional verb such as *be*, differences at advanced proficiency will emerge less in whether forms are produced correctly than in how constructions are distributed across structural environments, and it is this prediction that the present study tests directly.

2.2 Distributional development and constructional complexity

Usage-based approaches conceptualise language acquisition as the gradual abstraction of patterns from input rather than the internalisation of an abstract rule system (Ellis, 2002; Tomasello, 2003). Grammatical knowledge emerges through repeated exposure to usage events, with frequency and perceptual salience shaping acquisition order and stability. Ellis (2002) demonstrates that frequency effects operate across multiple levels of representation, such that high-frequency forms are processed more fluently and become entrenched earlier than low-frequency ones. For a highly frequent and multifunctional verb such as *be*, occurring across copular and auxiliary environments with distinct processing demands, the interaction between frequency and constructional complexity is particularly consequential: frequency may support relatively early stabilisation of morphological forms, while constructional complexity continues to shape their distribution across contexts.

Copular uses involve a direct relationship between subject and predicative complement, while auxiliary uses include progressive (*be* + V-ing), passive (*be* + V-en), modal, and existential constructions. The distinction is not only semantic but structural, with auxiliary environments involving greater grammatical complexity than

copular clauses (Huddleston & Pullum, 2002). Greater structural complexity in auxiliary environments predicts that copular uses may stabilise earlier in acquisition, creating a stable baseline against which continued redistribution within the auxiliary subsystem can be interpreted.

Acquiring a form, on this account, is not reducible to producing it correctly: it requires learning how it is distributed across the contexts in which it is licensed (Goldberg, 2006). At advanced proficiency, where surface accuracy may mask underlying differences in grammatical organisation, the distinction between accuracy and distribution becomes particularly consequential. Distributional development is not peripheral to acquisition but constitutive of it. If high-frequency forms become entrenched through repeated exposure, continued development at advanced levels may therefore emerge more clearly in patterns of distribution than in morphological accuracy, a prediction the present study tests directly across B2–C2 learner English.

2.2.1 Empirical studies on *be*

This multifunctionality has made *be* a productive test case for a recurring question in SLA research: whether copular and auxiliary uses develop in parallel, or whether learners gain control over some functions earlier than others. The most directly relevant empirical account is Ionin and Wexler (2002), who compare omission rates across copular and auxiliary uses of

be in child L2 learner data. Their results show that copular *be* is omitted less frequently than auxiliary *be* (16% vs. 33%), and that both are omitted less frequently than affixal morphology such as third person -s. Crucially, they attribute the hierarchy not to input frequency but to differences in syntactic status: copular *be* can be accessed more directly as a lexical form, whereas auxiliary *be* and inflectional affixes require the online computation of multiple grammatical features, making them more vulnerable to surface omission. Similar distinctions between copular and auxiliary trajectories are also reported in child L1 acquisition (Stromswold, 1991), suggesting that asymmetries within the *be* system may reflect underlying structural differences rather than input frequency alone.

What these studies share, however, is a focus on whether forms are supplied rather than how they are distributed across structural contexts. Ionin and Wexler (2002) and Stromswold (1991) draw primarily on child acquisition data, while Housen (2002) examines learners below the advanced proficiency range considered here. The construction-specific asymmetries identified in this work provide an important theoretical basis for the present analysis, but their applicability to advanced adult learner production cannot be assumed straightforwardly. The Open Cambridge Learner Corpus skews substantially toward adolescent and adult learners, with the 26–30 bracket forming the largest single group and most participants falling between mid-adolescence and early adulthood. The extent to which asymmetries identified in child acquisition persist in advanced adult learner populations therefore remains an open empirical question.

One study that moves closer to the present concerns is Rasinger (2005), which examined whether copular and auxiliary uses of *be* differed in morphological accuracy across speakers of varying ages of arrival, drawing on naturalistic spoken data from Bengali-English bilinguals in East London. The study aimed to establish whether earlier arrival predicted greater accuracy in one environment over the other. No statistically significant difference was found between the two environments across any arrival group. Rather than undermining the copula-auxiliary distinction, the null result instead highlights the limits of accuracy as an analytical lens and points toward the need for an approach capable of examining not only whether forms are produced accurately, but how they are distributed across structural environments within advanced learner production.

Research on the L2 English verb system more broadly provides further evidence that development varies across grammatical environments in ways not captured by accuracy alone. Housen (2002) offers the most detailed corpus-based account, drawing on longitudinal learner data across multiple proficiency levels to trace the emergence and use of verbal constructions involving progressive and passive forms of *be*. A consistent pattern is that progressive constructions emerge earlier and occur more frequently than passives, an asymmetry Housen associates with grammatical

complexity: passives require argument restructuring and integration of participial morphology, whereas progressives involve a more transparent mapping between form and function.

Most relevant here is Housen's (2002) finding that accuracy and distribution do not develop in parallel: passive constructions may be produced with relatively high accuracy when they occur, yet remain comparatively infrequent, a dissociation that directly supports the theoretical argument developed above. However, Housen's account has a structural limitation that is worth making explicit rather than simply noting in passing. By treating the verb system as a unified domain and aggregating across multiple verbs and constructions, his analysis cannot distinguish between patterns that reflect general properties of the L2 verb system and those that are specific to individual lexical items and their constructional histories. This matters because the dissociation between accuracy and distribution may operate differently depending on a verb's frequency, its degree of multifunctionality, and the processing demands of the environments in which it occurs. Aggregating across verbs with different frequency profiles and different constructional ranges risks producing findings that are internally inconsistent, where the developmental trajectory of a high-frequency multifunctional verb like *be* is averaged together with that of lower-frequency items whose distributional behaviour may be shaped by entirely different acquisition dynamics. The present study addresses this directly by restricting the analysis to a single lexical item across structurally distinct environments, a design choice that sacrifices breadth for precision and allows the interaction between frequency, constructional complexity, and distributional development to be examined without the interpretive noise that cross-verb aggregation introduces.

2.3 Corpus profiling and advanced proficiency

Hawkins and Buttery (2010) provide an important articulation of this approach within the English Profile Programme. Drawing on learner corpus data from the Cambridge Learner Corpus across multiple CEFR levels, Hawkins and Buttery aimed to establish whether proficiency could be characterised through characteristic patterns of

grammatical use rather than error counts alone. Their framework introduces criterial features: properties of learner language associated with particular proficiency levels and defined through frequency and contextual range. Crucially, their analysis shows that grammatical development does not follow a linear trajectory of error reduction: some features are produced accurately at relatively early stages but remain restricted in frequency and range, while others exhibit non linear patterns including temporary overuse and inverted U-shaped distributions across proficiency levels. The findings provide a clear empirical rationale for separating morphological accuracy from distributional behaviour and inform the two-layer design adopted in the present study.

The English Grammar Profile (O'Keeffe & Mark, 2017) represents the most systematic operationalisation of this approach, demonstrating that many grammatical features appear at lower proficiency levels but become more widely distributed at higher ones. By working across multiple grammatical domains, though, it necessarily prioritises broad developmental tendencies over fine-grained analysis of individual grammatical systems. The distinction between emergence and distribution is particularly relevant to advanced proficiency, where learners may produce forms accurately without deploying them across the full range of contexts characteristic of higher-level production. The cross-domain scope of the English Grammar Profile nevertheless limits the extent to which such interactions can be examined within a single grammatical system.

Taken together, these accounts establish a clear theoretical basis for separating morphological accuracy from distributional behaviour while also highlighting a more specific unresolved issue: relatively little attention has been paid to how these dimensions interact within a single high-frequency grammatical system across advanced proficiency level

3. The present study

The study addresses the following research questions:

1. Does the distribution of *be* across structural environments vary systematically across B2, C1, and C2 proficiency levels?
2. Does the morphological realisation of finite *be* forms continue to develop across the same proficiency range?
3. Do distributional and morphological dimensions show evidence of different developmental trajectories in advanced learner English?

The two-layer design separates distributional behaviour from morphological realisation in order to examine whether the two dimensions show different developmental trajectories.

4. Methodology

4.1 Corpus and data extraction

The data are drawn from the Open Cambridge Learner Corpus (Uncoded), a large-scale corpus of written L2 English (approximately 3.35 million tokens in total). Each occurrence of the lemma *be* is treated as a token for analysis. The corpus was selected for its scale and CEFR annotation, which enable systematic quantitative comparison across proficiency levels. The analysis is restricted to written production due to corpus availability.

The uncoded version was used to ensure that morphological accuracy was independently operationalised rather than inherited from corpus coding. The dataset is broadly balanced across levels (B2: 34.1%, C1: 32.9%, C2: 33.0%) and includes a heterogeneous learner population, reducing the likelihood that patterns reflect L1-specific transfer effects. All tokens of *be* were extracted using Sketch Engine (Kilgariff et al., 2014) via a lemma-based query ([lemma="be"]), yielding 148,403 tokens (B2: 51,863; C1: 49,001; C2: 47,539).

4.2 Layer 1: Distributional analysis

Layer 1 analyses the distribution of *be* across five mutually exclusive structural environments, operationalised using CQL in Sketch Engine. Progressive constructions were identified as [tag!="MD"] [lemma="be"] [tag="VVG"], and past participle constructions as [tag!="MD"] [lemma="be"] [tag="VVN"], excluding modal contexts to avoid overlap. The VVN category encompasses both passive and adjectival participle environments, reflecting the broader distributional role of *be* + VVN constructions rather than restricting the analysis to canonical passives alone. Modal environments were extracted as [tag="MD"] [lemma="be"], and existential constructions as [word="there"] [lemma="be"].

Copular tokens were defined as all remaining instances following the identification of auxiliary environments. Auxiliary constructions are more formally identifiable through part-of-speech patterns, with any residual tagging ambiguity therefore absorbed into the copula category. Tagging ambiguity was minimal across the dataset (<0.05%) and is unlikely to have materially affected the overall distributional patterns. Existential constructions were included for completeness but are not central to the developmental interpretation, as they do not participate in auxiliary chaining (the stacking of multiple auxiliaries before a main verb, as in *has been being built*).

Differences in distribution across levels were tested using a chi-square test of independence (CEFR level x structural environment), with all expected frequencies exceeding 5. Given the large sample, effect size provides a more informative indication of variation than statistical significance alone; Cramér's V is therefore reported throughout.

4.3 Layer 2: Morphological analysis

Layer 2 assesses whether the inflectional morphology of *be* has stabilised across B2–C2. Only finite forms (am, is, are, was, were) were analysed, as non-finite forms do not encode tense or agreement. A stratified random sample of 1,000 tokens per level (N = 3,000) was judged sufficient given the expected rarity of errors on a high-frequency form such as *be*, since the analysis aimed to identify meaningful morphological variation rather than fine-grained differences.

Tokens were manually coded as TARGET (correct form), AGR (agreement error), or TENSE (tense mismatch). Existential constructions were treated as copular for coding purposes. Given the expected rarity of errors, descriptive rates are prioritised over inferential statistics; statistically significant differences are interpreted cautiously where effect sizes remain substantively negligible.

5. Results

5.1 Layer 1: Distributional patterns across proficiency levels

Table 1 presents the distribution of *be* across structural environments across proficiency levels.

Table 1. Distribution of *be* constructions across CEFR proficiency levels (N = 148,403).

Level	Copula	Progressive	Past participle (<i>be</i> + VVN)	Modal	Existential
B2	65.6%	12.8%	7.5%	10.0%	4.1%
C1	63.7%	8.5%	12.2%	11.3%	4.4%
C2	66.6%	7.6%	13.3%	9.0%	3.5%

A chi-square test of independence indicated a significant association between CEFR proficiency level and structural environment, $\chi^2(8, N = 148,403) = 1897.3$, $p < .001$. The effect size was small (Cramér's $V = 0.080$), indicating modest but consistent distributional variation. At the broadest level, the overall split between copular and non-copular uses remains stable, with copular constructions accounting for approximately two thirds of tokens at each level. The chi-square result therefore reflects fine-grained redistribution within the auxiliary system rather than wholesale functional reorientation in the use of *be*, as illustrated in Figure 1.

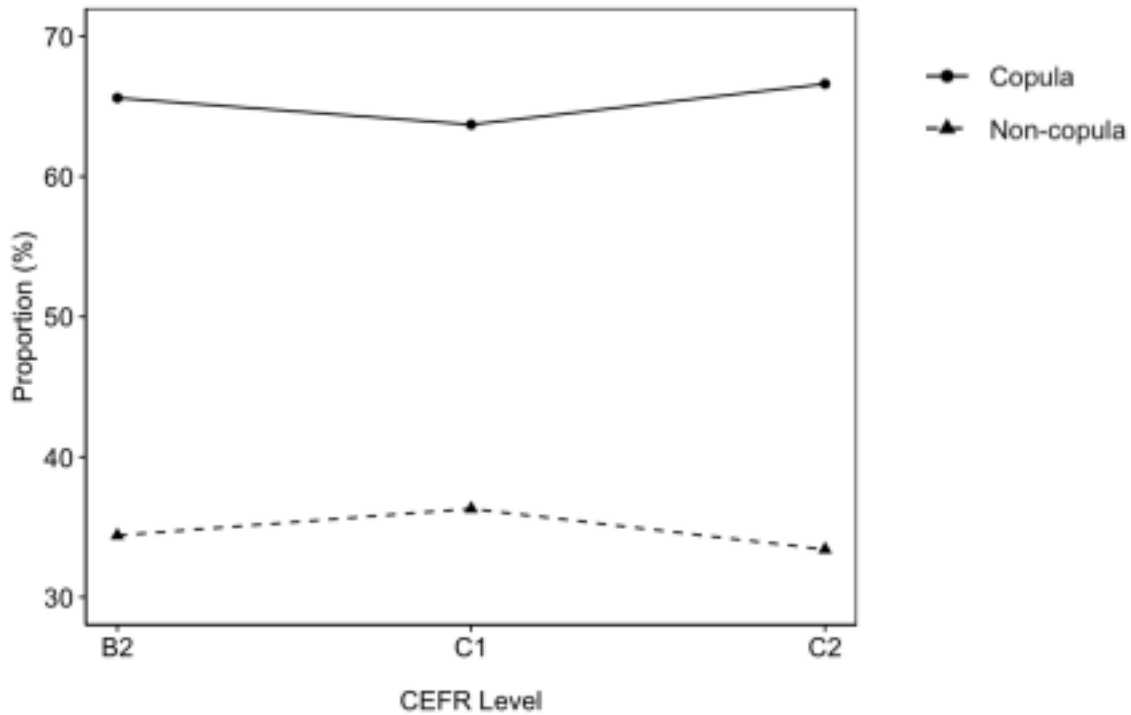


Figure 1. Proportion (%) of copular and non-copular uses of *be* across CEFR proficiency levels (B2–C2).

Standardised residuals identify which environments drive this association, and the pattern is concentrated in the auxiliary subsystem. As shown in Table 2 and Figure 2, progressive and past participle constructions pattern in opposite directions across proficiency levels: progressive constructions are strongly over-represented at B2 and decline steadily through C1 and C2, while past participle constructions show the inverse trajectory, under-represented at B2 and increasingly over-represented at higher levels. This crossover is consistent with the prediction that B2 learners rely more heavily on structurally simpler constructions while higher-proficiency learners expand into more complex ones. The trajectory is shown in Figure 2.

Table 2. Standardised residuals for *be* constructions across CEFR proficiency levels. Values exceeding ± 1.96 indicate a significant contribution to the chi-square result at $p < .05$.

Level	Copula	Progressive	Past participle (<i>be</i> + VVN)	Modal	Existential
B2	2.01	29.57	-31.01	-0.81	1
C1	-9.14	-11.43	11.18	10.53	5.46
C2	7.15	-18.7	20.41	9.78	-6.52

The increasing frequency of past participle constructions at higher proficiency reflects growing use of passive and adjectival participial environments, which are comparatively infrequent at B2 but become more integrated into the learner repertoire at C1 and C2. Crucially, this shift occurs in the absence of corresponding change in morphological accuracy, as the Layer 2 results establish, suggesting restructuring in constructional preferences rather than continued development in morphological control.

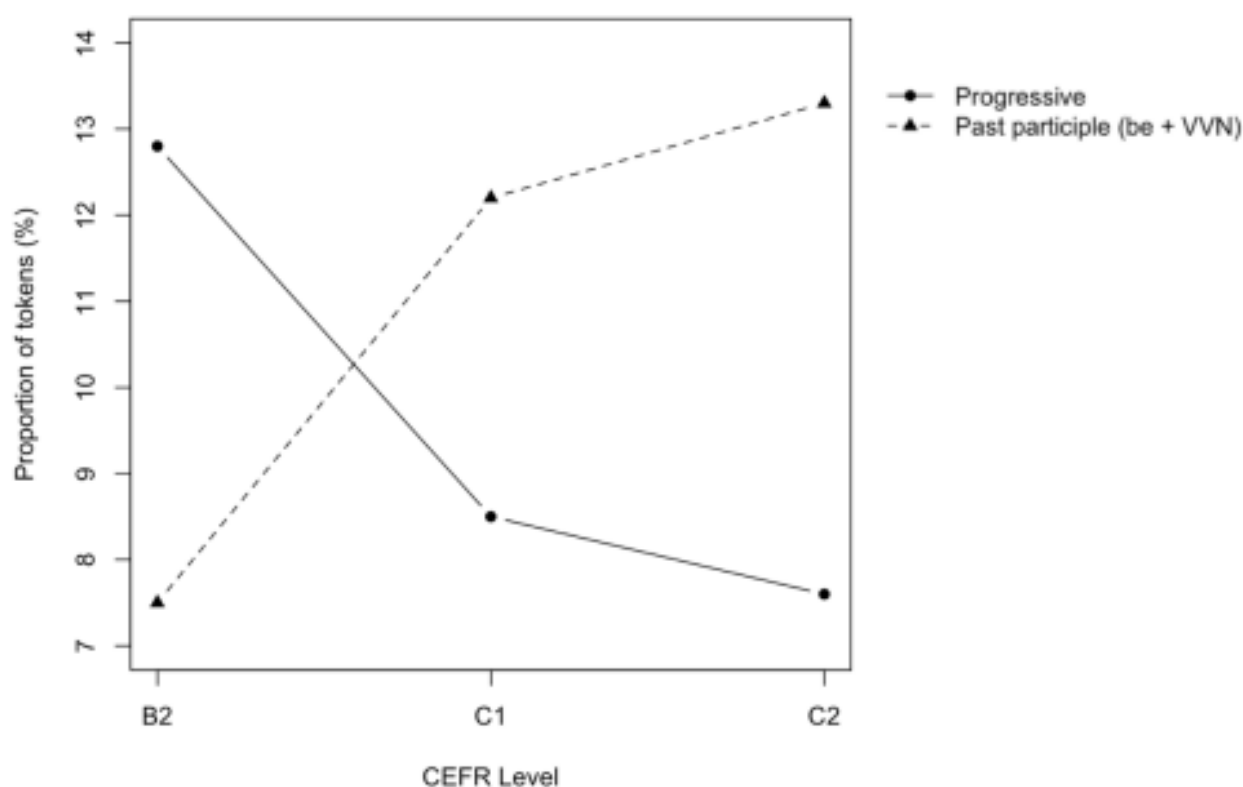


Figure 2. Proportional distribution of progressive and past participle (*be + VVN*) constructions across CEFR levels (B2–C2).

Modal environments show a non-linear pattern, with usage approximating expected frequencies at B2, over-representation at C1, and contraction again at C2. This inverted U shaped trajectory is consistent with temporary overuse patterns documented in the English Profile Programme (Hawkins & Buttery, 2010) and is discussed further in section 6.1. Existential constructions remain broadly stable across levels and are not interpreted as indicative of the same developmental restructuring observed in progressive and past participle environments, given that they do not participate in auxiliary chaining and their proportional variation is small.

5.1.1 Pairwise comparisons and residual analysis

Pairwise chi-square tests were conducted to assess where distributional differences are most pronounced, using a Bonferroni-corrected threshold of $\alpha = .017$. Results are presented in Table 3.

Table 3. Pairwise chi-square comparisons across proficiency levels with Bonferroni correction ($\alpha = .017$). Cramér's V reported as effect size.

Comparison	N	χ^2 (df = 4)	p	Cramér's V
B2 vs C1	100,864	1077.4	$p < .001$	0.103
C1 vs C2	96,540	247.6	$p < .001$	0.051
B2 vs C2	99,402	1519.8	$p < .001$	0.124

All comparisons were significant ($p < .001$), though effect sizes differed across transitions. The B2–C1 comparison yielded a larger effect ($V = 0.103$) than the C1–C2 comparison ($V = 0.051$), indicating that the most substantial redistribution occurs between B2 and C1. The larger B2–C2 effect ($V = 0.124$) reflects cumulative change across the proficiency range. The transition from B2 to C1 therefore represents the main site of distributional reorganisation, with C2 more likely reflecting consolidation than substantial further change.

5.2 Morphological realisation of finite *be*

Table 4 presents the distribution of morphological realisations of finite *be* forms across a stratified sample of 1,000 tokens per level.

Table 4. Morphological realisation of finite *be* forms across proficiency levels (1,000 tokens per level).

Level	Target-like	AGR errors	TENSE errors	Total errors	Error rate
B2	983 (98.3%)	15	2	17	1.70%
C1	986 (98.6%)	9	5	14	1.40%
C2	999 (99.9%)	1	0	1	0.10%

Morphological accuracy is high across all levels, with error rates of 1.7% at B2, 1.4% at C1, and near-categorical 0.1% at C2. Within this narrow margin, agreement errors outnumber tense errors at both B2 (15 vs. 2) and C1 (9 vs. 5). One possible interpretation is that agreement imposes greater computational demands than tense, requiring online checking of person and number features rather than a simpler present/past distinction, a possibility consistent with Prévost and White's (2000) account. However, the error counts are too low to support strong conclusions. That both error types effectively disappear at C2 nevertheless supports the broader interpretation that morphological stability is already largely in place by B2.

6. Discussion

6.1 Distributional restructuring across proficiency levels

The auxiliary crossover documented in Layer 1 is the study's main finding, and the key issue is not simply that progressive and past participle constructions shift in opposite directions, but why that redistribution occurs at that transition, and what it implies about advanced grammatical development.

The dominance of progressive constructions at B2 is best explained by two factors: the transparency of the progressive form-function mapping and its high frequency in learner input. On Ellis's (2002) usage-based account, high-frequency exposure supports early entrenchment, and the progressive offers a relatively direct relationship between form and meaning that requires less inferential work than the more syntactically demanding *be* + VVN environment. Past participle constructions, by contrast, require learners to integrate participial morphology with either argument restructuring in passive uses or complex adjectival predication, and their lower input

frequency means they are less deeply entrenched at lower proficiency levels. The B2 distributional profile therefore reflects not arbitrary preference but a principled asymmetry in constructional accessibility.

What is more theoretically significant is the concentration of change between B2 and C1, with C2 reflecting consolidation rather than further reorganisation. This suggests that the transition to C1 marks a qualitative reorganisation in how the auxiliary system is deployed, as learners extend into a broader auxiliary repertoire and the *be* + VVN environment becomes sufficiently entrenched to function productively. This pattern aligns with Lardiere's (2009) Feature Reassembly account, which frames advanced development not as the acquisition of new forms, but as the restructuring of existing grammatical knowledge across a wider range of structural environments.

One interpretation, consistent with Hawkins and Buttery's (2010) documentation of temporary overuse in the English Profile Programme, is that C1 learners overextend into modal constructions as part of broadening their functional range before fully calibrating their contextual deployment. Modal constructions in written English carry epistemic and pragmatic weight beyond their grammatical function, and the overrepresentation at C1 may reflect a learner population actively expanding into that functional territory before the contraction at C2 reflects more selective contextual calibration. The pattern may therefore capture a distinction between gaining productive access to a construction and regularising its distribution across contexts, though this possibility cannot be tested directly with the present data.

Across all three proficiency levels, copular constructions account for approximately 65% of tokens, a proportion that remains essentially unchanged while the auxiliary subsystem undergoes the redistribution documented above. The constancy of the copular share in this context is structurally informative: it identifies the portion of the *be* system where active development appears to have largely stabilised, and its stability is what allows the auxiliary crossover to be interpreted as systematic reorganisation rather than random fluctuation. From a usage-based perspective, high input frequency supports early consolidation, and copular *be*, as the most frequent and syntactically least demanding environment, would therefore be expected to stabilise earliest. Ionin and Wexler (2002) independently support this on syntactic grounds, arguing that

copular *be* requires less online feature computation than auxiliary forms. What the present data add is a proficiency-level perspective: by B2, the copular environment appears sufficiently consolidated that subsequent development concentrates instead in auxiliary environments where constructional complexity continues to create scope for redistribution. The system therefore develops not uniformly but selectively, and the copular plateau is constitutive of that selectivity: development at advanced proficiency is partly defined by where change is no longer occurring.

The increase in past participle (*be* + VVN) constructions may therefore partly reflect the properties of writing tasks associated with higher CEFR bands rather than proficiency-driven restructuring alone, since more formal argumentative writing independently favours passive constructions. A purely genre-based explanation remains insufficient, as the crossover between progressive and past participle constructions is consistent across all pairwise comparisons and aligns with independent predictions from constructional complexity accounts. More importantly, the ability to deploy passive and adjectival participial constructions appropriately in response to formal register demands is itself a dimension of advanced grammatical competence. If higher-proficiency learners produce more past participle (*be* + VVN) constructions partly because they are writing in more formal registers, the pattern still reflects an expansion in constructional repertoire and growing sensitivity to register as interacting components of advanced proficiency.

6.2 Morphological stability and the limits of accuracy

Error rates across the proficiency range are low at B2 (1.7%) and C1 (1.4%) and approach categorical accuracy at C2 (0.1%), with no meaningful developmental trajectory across the three levels. The near-absence of morphological error even at B2 is the substantive finding here, and its implications extend beyond establishing a baseline. The observed pattern is more compatible with a sequential relationship between morphological and distributional stabilisation than with parallel development across the two dimensions. If the two were developing in tandem, morphological

instability at B2 would remain a plausible competing explanation for the distributional patterns documented in Layer 1. The stability of the morphological baseline substantially weakens that explanation: by the point at which substantial distributional restructuring is occurring, inflectional accuracy on *be* appears already largely settled. This raises the possibility that advanced development in high frequency grammatical systems proceeds in partially ordered phases, with morphological stabilisation potentially functioning as a prior condition rather than a concurrent process, though the cross-sectional design and restriction to a single grammatical system mean this cannot be established as a general principle from the present data alone.

The present findings also sit in partial tension with Prévost and White's (2000) Missing Surface Inflection Hypothesis. The MSIH attributes morphological variability to surface realisation difficulties despite intact underlying representations, predicting that some degree of surface instability persists even where grammatical knowledge is well-established. The present data show that even surface variability is effectively absent across the proficiency range examined. One interpretation is that the MSIH captures a real phenomenon whose visibility is sensitive to lexical frequency: for a verb as frequent as *be*, the mapping between underlying representation and surface form may become sufficiently automatised that the realisation difficulty the MSIH describes is no longer detectable at advanced proficiency levels. This is necessarily speculative given that the present study examines a single high-frequency item, and extending the claim across grammatical systems with different frequency profiles would require considerably broader evidence. What it does suggest, cautiously, is that frequency may modulate where along the proficiency continuum morphological stabilisation occurs, and that accuracy-based frameworks calibrated on lower-frequency forms may underestimate how early that stabilisation can take place.

6.3 Implications for advanced L2 development

The asymmetry between the B2–C1 and C1–C2 transitions suggests that advanced

development may proceed through concentrated phases of restructuring followed by periods of consolidation rather than through smooth linear progression. If so, approaches that operationalise the upper CEFR range as a single continuous developmental trajectory may obscure a qualitative distinction between the restructuring characteristic of the B2–C1 transition and the consolidation characteristic of C2. The difference between C1 and C2 production, on this account, may be less a matter of continued acquisition than of the stabilisation and contextual calibration of a repertoire already substantially in place.

Reframing advanced development in distributional rather than purely accuracy-based terms has direct consequences for how advanced proficiency is assessed. The CEFR descriptors for C1 and C2 place increasing emphasis on fluency, flexibility, and range (Council of Europe, 2001), but learner corpus approaches used to operationalise those descriptors have often remained accuracy-focused in practice (O’Keeffe & Mark, 2017). The present findings suggest that distributional measures, examining how constructions are deployed across structural environments rather than simply whether forms are produced correctly, may be better aligned with what the upper CEFR levels are designed to capture. A proficiency framework that treated constructional range and distributional calibration as primary indices of advanced competence might provide a more adequate account of what distinguishes C1 from C2 production than current approaches allow. The modal pattern documented in section 5.1 is particularly relevant here: the overrepresentation of modal constructions at C1 followed by contraction at C2 is invisible to accuracy measurement but directly reflects the kind of register sensitivity and contextual calibration that the C2 descriptor is attempting to characterise.

The broader implication is that the field may need different analytical tools for different portions of the proficiency range rather than a single metric applied uniformly. Accuracy remains a meaningful index at lower proficiency levels, and the morphological baseline established in Layer 2 is precisely what allows the distributional findings of Layer 1 to be interpreted with confidence. But for high-frequency grammatical systems where morphological stabilisation occurs early, accuracy-based approaches may systematically underestimate the extent to which development continues, not because development has ceased but because the

dominant measures are not sensitive to where it is occurring.

7. Conclusion

This study set out to examine whether development in the use of *be* continues across advanced proficiency levels and whether distributional behaviour captures that development more effectively than morphological accuracy alone. The findings support both claims, though the developmental pattern is more structured than a simple accuracy-distribution contrast implies. Morphological realisation is effectively stable by B2, distributional restructuring is concentrated between B2 and C1, and C2 reflects consolidation rather than further reorganisation. The dissociation between the two dimensions is not only empirical but potentially sequential, with morphological stabilisation appearing to function as a prior

condition for the distributional restructuring that follows, a relationship that accuracy-based approaches are not designed to detect and would not have revealed.

These conclusions are constrained by the study design. The cross-sectional approach cannot track developmental sequences within individual learners, the restriction to written production limits generalisability to spoken interaction, and the focus on a single verb limits generalisation across grammatical systems, though this restriction is also a deliberate methodological choice: by isolating a single high-frequency item, the design avoids the cross verb aggregation that obscures the interaction between frequency, constructional complexity, and distributional development, a problem identified in Housen (2002) and directly motivating the present approach. The heterogeneous L1 composition of the corpus prevents systematic investigation of transfer effects, and the absence of a native speaker baseline means the trajectory documented here cannot be interpreted in terms of convergence toward target-like norms. Longitudinal, cross-modal, and multi-system designs therefore represent productive directions for future work.

Within those limits, the study demonstrates that grammatical development at advanced proficiency remains empirically detectable when the analytical focus extends beyond accuracy alone, and that the site of that development may be less visible than

previously assumed not because it is absent, but because the dominant measures have not been sensitive to where it occurs.

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