

L2 Status Factor Hypothesis vs. Typological Proximity in Chinese-English Bilinguals' L3 Syntactic Transfer

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Abstract. This study employs the typological opposition between Chinese (isolating) and English (inflectional) languages and bidirectional acquisition sequences (L1- Chinese/L2- English vs. L1- English/L2- Chinese) as a theoretical framework to examine the dynamic interplay between the L2 Status Factor Hypothesis and Typological Proximity in third language (L3) syntactic transfer. Findings reveal that L2 English often dominates move because of its global lingua franca reputation and its cognitive accessibility, whereas L2 Chinese exhibits less effective move because of significant stylistic disparities and the antagonistic effects of its logographic writing system on linguistic internalization. Furthermore, the study elucidates how opinions regarding "L2 Chinese move loss" occur from systemic prejudices shaped by national learning policies that create proficiency gaps and individual variables, including proficiency thresholds, age of acquisition, usage frequency, and psychotypology. By challenging the complete primacy of merger get in current transfer models, this study provides a conceptual framework for developing scientifically grounded multilingual education policies.

Keywords: L2 Status Factor Hypothesis, Typological Proximity, Chinese-English Bilinguals, L3 Syntactic Transfer

1. Introduction

In crosslinguistic influence theory, third language (L3) transfer has become a central domain rather than a peripheral subfield of second language acquisition (SLA). The global surge in demand for multilingual competence has prompted scholarly recognition that L3 cognitive processing constitutes not a mere extension of L1→L2 transfer mechanisms, but rather complex interactions among multiple linguistic systems within a dynamic multilingual framework [1,2]. This paradigm shift positions source language transfer—particularly competitive transfer from L1 and L2 to L3—as a critical investigative lens for elucidating multilingual cognitive architecture.

Contemporary theoretical models coalesce around two fundamental dimensions: the unit of transfer (holistic versus property-based) and the determinants of transfer source. Regarding transfer units, the Full Transfer/Full Access Hypothesis (FT/FA) and Typological Proximity Model advocate holistic migration, with FT/FA positing complete transfer of L1 grammar to the initial L3 state [3]. Empirical evidence, however, reveals L2-dominant syntactic transfer during early L3 stages—particularly when typological similarities exist—contradicting full L1 migration [4]. The

Typological Proximity Model further contends that initial transfer derives from structural similarity, with learners unconsciously selecting the typologically closest previously acquired system through parser-driven hierarchical assessment [5]. Property-based frameworks include the Scalpel Model, wherein input frequency and structural complexity modulate selective reliance on L1 or L2 across different syntactic structures [6]; the Cumulative Enhancement Model (CEM), which restricts positive transfer to instances where previously acquired properties match L3 targets [2]; and the Language Proximity Model, which imposes no matching constraints. Concerning transfer sources, the L2 Status Factor Hypothesis attributes cognitive primacy to L2 through acquisition sequence and accessibility advantages [7], asserting L2's default status as the preferred transfer source. Conversely, the Typological Proximity Model (TPM) identifies structural similarity as the ultimate predictor of transfer, relegating acquisition order to secondary status [5].

These theoretical divergences collectively demonstrate that L3 syntactic transfer source selection constitutes a dynamic multivariate interaction system rather than a monocausal phenomenon. Consequently, a pivotal research question emerges: how do the L2 Status Factor and Typological Proximity dynamically interact to govern source selection during competitive L1/L2→L3 syntactic transfer? More fundamentally, under which cognitive-linguistic conditions does one factor supersede the other to dominate transfer processes? Additionally, research has found that when the second language is Chinese, syntactic transfer in the third language exhibits asymmetry. What causes this phenomenon? Resolving these questions bears significant theoretical implications for understanding multilingual cognitive organization.

The present study addresses this nexus by examining Chinese-English bilinguals through a comparative analysis of bidirectional acquisition pathways (L1-Chinese/L2-English versus L1-English/L2-Chinese), thereby deconstructing the dynamic competition between the L2 Status Factor and Typological Proximity in crosslinguistic transfer sequences. It further investigates the frequent inefficacy of the L2 Status Factor when Chinese serves as L2 by incorporating policy-induced variables and individual cognitive modulators, including proficiency levels, age of acquisition, and input frequency.

2. Acquisition sequence effects on L3 transfer source selection

2.1. L1-Chinese/L2-English bilinguals

Within the L1-Chinese/L2-English bilingual population, L3 transfer source selection manifests as a dynamic interplay between the cognitive privilege conferred by the L2 Status Factor and structural constraints imposed by typological proximity. L1 Chinese transfer typically requires stringent conditions, becoming viable only when profound typological similarity exists between Chinese and L3 in deep structural configurations. For instance, Japanese classifier systems may trigger Chinese-source syntactic transfer due to morphological congruence [8], while Korean topic structures facilitate transfer through covert null-subject parameter alignment [9]. Notably, such typology-driven L1 transfer effects intensify at advanced L3 proficiency stages, where learners' heightened sensitivity to abstract syntactic features enables more effective recognition of crosslinguistic structural correspondences [10].

Conversely, L2 English demonstrates cognitive advantages through its shared "non-native" psychological tagging with L3, enhancing neural accessibility in the left mid-temporal gyrus where English syntactic representations are preferentially activated [11]. Furthermore, English's global lingua franca status amplifies its cognitive accessibility, establishing it as the default transfer source across numerous contexts [12]. Empirical evidence corroborates this dominance: learners acquiring

German L3 preferentially transfer English SVO word order and article systems during initial stages despite detectable syntactic parallels between German and Chinese [13]. This L2 advantage proves particularly pronounced in early L3 acquisition, where learners' reliance on declarative memory for explicit knowledge favors the most recently acquired non-native language [7].

Nevertheless, the transfer advantage of English is not absolute but rather constrained by dynamic moderating variables. Achieving threshold L2 English proficiency (e.g., CEFR B2 level) [14], while developing a progressive L3 proficiency level, increases typological sensitivity, potentially lowering the L2 Status Factor's influence [10]. Consequently, transfer source selection constitutes a dynamic equilibrium wherein English's default advantage proves relative rather than absolute—L1 Chinese can override L2 dominance when deep typological matching conditions prevail.

2.2. L1-English/L2-Chinese bilinguals

The L1-English/L2-Chinese sequence exhibits marked asymmetry in syntactic transfer source competition, governed principally by the profound typological divide between English and Chinese and the representational characteristics of L2 Chinese. L1 English's core inflectional characteristics, such as SVO word order and tense morphology, consistently predominate transfer to typologically closest Indo-European L3s (e.g., German, Swedish). Neurocognitively, this benefit stems from shared declarative memory processing mechanisms between English L1 and morphologically identical L3s, maintaining higher neural accessibility in the remaining mid-temporal lobe [11]. English's global status further consolidates its position as the default transfer source [7], evidenced empirically by significantly stronger English-source syntactic transfer intensity during Japanese L3 acquisition compared to the reverse sequence [12,15].

Through either script relativity (e.g., Kanji-based lexical borrowings in Japanese facilitating the transfer of Chinese vocabulary [16]) or conceptual congruence (e.g., shared spatiotemporal metaphors enabling lexical-semantic migration [17]), L2 Chinese transfer operates under largely constrained parameters and only achieves limited counteraction in non-syntactic domains. Critically, such transfer remains contingent upon reaching higher proficiency thresholds (e.g., B2 level) to activate conceptual representations effectively [14]. Even when these conditions are met, L2 Chinese transfer rarely permeates core syntactic domains [16], underscoring how typological distance fundamentally constrains structural permeability. Subsequently, this paper will delineate the causes underlying the attenuation of syntactic transfer when L2 is Chinese from multiple lenses: the typological gap, orthographic systems, national policies, and individual differences.

3. Revisiting the inefficacy of the L2 status factor in Chinese as L2

The L2 Status Factor Hypothesis posits inherent transfer advantages for any second language [7], a claim substantiated by empirical evidence when English serves as L2 [12]. Paradoxically, syntactic transfer from Chinese as L2 proves significantly constrained [16]. This discrepancy raises fundamental questions about the universality of the L2 Status Factor and necessitates examination of the unique constraints governing Chinese L2 transfer.

3.1. The typological chasm as structural barrier

Chinese, as a prototypical isolating language, exhibits core syntactic features fundamentally misaligned with inflectional L3s—most notably its topic-prominent structure [16]. This profound typological distance impedes syntactic permeability, creating an interface deficit that persists even

when the L2 Status Factor is operative [5,18]. Consequently, typological proximity constitutes a prerequisite bottleneck for the L2 Status Factor's efficacy.

3.2. Logographic processing and representational constraints

The logographic nature of Chinese imposes distinctive cognitive demands. Character decoding requires intensive visuo-semantic mapping, compelling learners toward explicit knowledge and declarative memory reliance [14,19]. This processing burden consumes cognitive resources otherwise available for implicit acquisition of abstract syntactic rules, resulting in underdeveloped representations that fail to attain the automatization threshold (e.g., B2 level) necessary for effective transfer. Crucially, even communicatively fluent learners exhibit weaker neural consolidation and accessibility of Chinese syntactic representations compared to alphabetic L2 counterparts at equivalent proficiency [19]. Logographic processing thus imposes an extraneous cognitive tax on syntactic knowledge extraction and transfer.

3.3. Policy-driven proficiency disparities

Conclusions regarding "L2 Chinese transfer failure" may reflect methodological artifacts stemming from systematically low-proficiency samples in Western studies, revealing how national language policies shape linguistic competence. Elective Chinese programs in Europe and America yield cohorts with limited proficiency—exemplified by Smith's study, where 78% of German L1 participants scored \leq HSK-4 (\leq CEFR A2) after 2.5 average learning years, resulting in mere 9% syntactic transfer rates [16]. These conditions originate in policy frameworks: merely 5% of EU secondary students study Chinese [20], while U.S. public high school enrollment reaches only 11% [21], with instructional hours constituting less than one-third of China's mandatory English curriculum [22].

Conversely, China's compulsory English education policy (4–5 weekly hours over 12 years) enables 68% of undergraduates to attain CET-4 proficiency (\approx B1–B2) [23]. Policy-driven proficiency disparities create significant competency gaps across experimental cohorts—a dynamic wherein L2 Chinese manifests substantially enhanced transfer capacity upon reaching critical proficiency thresholds. For instance, Chinese majors at Anglo-American universities (HSK-5/B2+) show 41% topic-structure transfer to Korean L3 versus 8% in non-major peers [24]. These findings collectively expose the "L2 Status Factor inefficacy" as a policy-induced artifact of low-proficiency sampling [25], necessitating rigorous control of proficiency variables to disentangle policy effects from typological determinants.

4. Dynamic modulation by individual differences on L2 Chinese transfer inefficacy

While the L2 Status Factor and Typological Proximity constitute the theoretical core of L3 transfer, individual differences—particularly proficiency levels, age of acquisition (AoA), usage frequency, and psychotypology—interact synergistically to modulate the diminished transfer efficacy observed when Chinese serves as L2 [26].

Proficiency thresholds exert dual-phase regulatory control: sub-B2 competence in L2 Chinese impedes systemic syntactic transfer due to insufficient cognitive accessibility, defaulting source selection to L1 English dominance [14]. Even post-threshold attainment cannot guarantee robust transfer during initial L3 stages, where declarative memory reliance prioritizes recently accessed

languages, suppressing Chinese syntactic activation until learners progress beyond B1+ proficiency and develop heightened typological sensitivity [10].

Late acquisition (>15 years) compounds these constraints through neurocognitive pathways. Learners predominantly reliant on declarative memory exhibit fragile syntactic representations that resist neural consolidation [27], resulting in deficient implicit internalization of Chinese grammatical rules even at C1 proficiency—a representational deficit that directly undermines the L2 Status Factor's operational capacity [28].

Usage frequency generates paradoxical effects: whereas intensive L3 exposure (>2 daily hours) accelerates the attrition of all transfer sources, L2 Chinese atrophies at twice the rate of L1 transfer [15]. Crucially, active suppression of L1 English in foreign language mode unexpectedly induces transient activation of L2 Chinese [29], though this manifests primarily as lexical interference rather than syntactic transfer due to underdeveloped structural representations [30].

Psychotypology further modulates outcomes through cognitive filtering. Subjective underestimation of Chinese-L3 typological affinities (e.g., overlooking shared topic-comment structures) directly suppresses potential transfer [30], while overestimation of English-L3 similarity (e.g., hyper-focusing on SVO congruence) disproportionately consolidates L1 English advantages [31].

5. Critical gaps: quantifying transition thresholds in transfer source dynamics

While experimental studies delineate micro-level biological patterns in transfer source selection—exemplified by U-designed trajectories where L2 dominance peaks immediately before subsiding toward target-language norms—the accurate critical conditions triggering source shifts remain unquantified [32]. This information space manifests mainly through two linked aspects: the precise L3 proficiency threshold (e. g., B1+), which causes a paradigm shift from L2 English to L1 Chinese dominance, and the symbiotic relationship between L3 type consistency and proficiency rates in advancing L2 transfer attrition. The L2 Status Effect is clearly reduced by high-frequency L3 exposure [15], but its interactional weighting with proficiency variables is still a mystery. The empirically supported twofold increase in L2 transfer attrition versus L1 [15] suggests governance through unnamed neurocognitive mechanisms. Resolving these uncertainties necessitates computational models parameterizing important transition points, which would instantly predict inflection points in non-Indo-European L3 acquisition pathways for Chinese-English bilinguals and reconcile the contradictory coexistence of heightened first L2 transfer intensity with its rapid decay. Such models would further inform progressive transfer-inhibiting pedagogical interventions while advancing L3 acquisition theory from qualitative frameworks toward computationally predictive systems.

6. Conclusion

This study reveals through the dual prisms of typological opposition (isolating versus inflectional) and bidirectional acquisition sequences that L3 transfer source selection constitutes a dynamic multivariate interaction system. When Chinese functions as L2, its typological isolation and logographically induced cognitive resource depletion robustly challenge the presumed universality of acquisition sequence primacy in transfer models. Concurrently, policy-driven proficiency disparities—particularly the systemic low-proficiency sampling ($HSK \leq A2$) prevalent in Western studies—have generated questionable conclusions regarding "Chinese L2 transfer failure". These findings not only help L3 exchange theory advance toward more complex context-sensitive models,

but they also provide insight into how plan interventions change language representations, thus maximizing resource allocation in multilingual education.

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